Malatest International

# Evaluation of changes to prevocational medical training

November 2018

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## Executive summary

Prevocational medical training (the intern training programme) spans the two years following graduation from medical school and includes both postgraduate year 1 (PGY1) and postgraduate year 2 (PGY2).

Implementation of the intern training programme began in 2014. As a first stage of a quality assurance process, the Council commissioned a baseline data analysis as a starting point from which to consider the programme's effectiveness over time.

Almost five years after the programme's introduction, the Council commissioned independent organisation Malatest International Ltd to evaluate whether it had delivered the improvements in intern training as intended.

The focus of this evaluation was on the extent to which the intended outcomes had been achieved between 2014 and mid-2018.

Information for the evaluation was sourced from:

- In-depth interviews with senior clinicians, supervisors, and interns
- Comparison of findings between baseline and follow-up surveys of prevocational educational supervisors, clinical supervisors and PGY1 and PGY2 interns
- Analysis of eportfolio (ePort) data about meetings between clinical supervisors and interns, and records of professional development plans (PDP).

This report summarises the findings of the evaluation of the changes made to the programme since 2014.

### General support for the changes to prevocational medical training.

The findings indicated there was overall support for the changes that had been made to the prevocational training programme. In particular, high levels of overall satisfaction with the quality of the training programme were reported by PGY1 and PGY2 interns (76% and 69% respectively).

Almost all prevocational educational supervisors were supportive of the changes as they had provided increased transparency, structure and mechanisms to aid continuous improvement. They considered there was improved vertical integration across the education continuum.

### Supervisor Training

Since the programme began, there has been a significant increase in the number of prevocational educational supervisors and clinical supervisors who had attended training and there continued to be high demand for training; 50% of prevocational educational supervisors and 40% of clinical supervisors would like to receive further training.

### Use of the ePortfolio platform (ePort)

ePort is an online tool used by interns to record learning and track progress. Every intern has their own ePort account that allows them to record the NZCF learning outcomes they attain, create and update their PDP, record professional development activities and view their assessments.

Prevocational educational supervisors and clinical supervisors were positive about the use of ePort and the transparency and value it provided. About 70% of supervisors found it easy to use, while the response from interns about usability was mixed.

However, the surveys and interviews showed a number of interns considered ePort and the New Zealand Curriculum Framework, which outlines what interns need to learn, as one and the same thing and that the negative comments were actually more about how they viewed framework.

Feedback from DHB Resident Medical Officer managers suggested tension remained between employment (human resources) responsibilities and training. Some managers considered ePort reduced their access to and visibility of intern information, compared to previous paper-based assessments. In some cases, reduced visibility made it harder for RMOs to identify and support underperforming or struggling interns. In contrast, supervisors reported that ePort made it easier to identify struggling interns sooner.

### The New Zealand Curriculum Framework

Most supervisors and interns agreed that the New Zealand Curriculum Framework was a helpful tool for assessing competence. One-quarter to one-third of PGY1 and PGY2 strongly agreed or agreed with the benefits of the framework. However, all groups considered the current framework too detailed, sometimes difficult to use and it was often referred to as a 'tick-box' exercise.

There was general support for the review currently being undertaken by Council on the framework.

### Professional Development Plans (PDP)

There was general support for use of a PDP. Data recorded in ePort suggested that the PDP added value to an intern's training, with an average of nine goals being set per year by each intern over the past four years.

PDPs for both PGY1 and PGY2 interns were being consistently discussed with prevocational education supervisors and clinical supervisors at the start and end of clinical attachments.

Suggestions for improvement were mostly around increased PDP guidance for both interns and supervisors, including exemplars of goals.

### Community-based attachments (CBAs)

The inclusion of a CBA as one of the interns' attachments was gradually being phased in with the expectation that by end of 2020 intern year, 100% of interns would complete at least one CBA during their two prevocational years. But there remain challenges to reach this target.

At the time of the survey, just 30% of interns had completed a CBA, with ongoing challenges in some areas to establish placements in community settings and DHBs releasing interns to work in settings outside the hospital.

However, where interns had been able to complete a CBA, both interns and supervisors were very positive about the experience. Interns reported that it had provided them with a better understanding about the primary and secondary interface.

The flexibility of establishing a range of CBAs in different settings was helpful to reduce pressure on finding placements in only general practice.

### Inclusion of PGY2 interns in the prevocational training programme

The inclusion of PGY2 interns as part of the prevocational training programme was one of the key changes introduced.

Most prevocational educational supervisors, clinical supervisors and interns were positive about the inclusion of PGY2 into the prevocational training programme. Some commented that with changed rosters the extension of prevocational training to PGY2 was essential as interns could not gain the competencies they needed from one post-graduate year.

Prevocational education supervisors and clinical supervisors had more clarity about the learning outcomes for PGY2 (a 19% increase) and more PGY2 interns understood the learning outcomes they were required to obtain compared to when the baseline survey was undertaken.

There was still a need for increased support and guidance for both medical students entering prevocational training and for PGY2 interns undertaking a vocational training programme, to ensure they were ready for the next step in their training.

### Balance between service obligations and clinical education

Tension remained between the service obligations of the DHB and clinical education.

Most interns considered there was adequate time for direct clinical contact, but fewer than half PGY1 (40%) and PGY2 (40%) interns considered they had sufficient protected time for education.

Many commented that the new rostering requirements, which form part of the Multi-Employer Collective Agreement for interns employed by DHBs, had generated challenges with the apprenticeship model of teaching. Clinical supervisors often had

less contact with interns, relief attachments could leave interns with less supervision, and there was reduced continuity of care for patients.

### Supervision on attachments

Most interns felt they were treated with respect, were valued as a member of a multi-disciplinary team and had supervisors who were interested in making them better doctors.

Comments from both supervisors and interns suggested the need for more protected supervision and teaching time. Prevocational educational supervisors were overall satisfied with their clinical roles and along with clinical supervisors, all would like to continue in their educational roles.

While the quality of teaching programmes received by interns was highlighted as an issue by both prevocational educational supervisors and clinical supervisors, just over half of PGY1s (55%) and a similar proportion of PGY2 (66%) were satisfied with the quality of their last clinical attachment.

While most interns felt able to ask their supervisor for help when needed, only two-thirds agreed or strongly agreed that their clinical supervisors involvement was adequate. Some interns emphasised the registrars' role in clinical teaching and suggested registrars may need formal training in supervision and how to provide feedback. Changes to rosters and the relief attachments may have increased the role of registrars in prevocational training.

Interns highlighted the importance of 'hands-on' clinical experience and good quality supervision in their training. Too much paperwork and too many administrative tasks were described as limiting 'hands-on' clinical practice.

### Meeting quality and recording

Most clinical supervisors recorded meetings at the start and end of clinical attachments. However, many mid-point meetings were poorly recorded in eport, with some recorded at the same date as the meeting at the start of the attachment.

As a result of rostering challenges and the increasing number of relief attachments, some interns said they saw more of the registrar than the clinical supervisors. They thought registrars and other junior staff may have an increasingly important role in providing feedback about interns' progress.

### Intern Wellbeing

Interns and supervisors self-assessed their wellbeing using scales based on the four domains of Te Whare Tapa Whā. Wellbeing scores from prevocational educational supervisor and clinical supervisor survey responses were mostly positive. In contrast, fewer interns were positive about their wellbeing and about one in 10 needed more support than they were currently getting.

Early identification of interns in difficulty through ePort and earlier intervention may have contributed to improved intern wellbeing. Several people interviewed noted that conversations about wellbeing were now happening much more than in the past.

### Accreditation and DHB support for training

Council's accreditation standards and processes received positive feedback. Many reported that the processes provided increased awareness and definition around the roles and responsibilities of DHBs and supervisors in prevocational training.

Clinical supervisors reported they felt less supported in their educational role by DHB management compared to prevocational educational supervisors, with workload pressures still proving to be an issue. Many prevocational education supervisors considered the accreditation process had made it easier for them to make changes to improve educational processes. A maximum of 10 interns for each prevocational educational supervisor had helped to manage workload, although some reported that they still supported more than 10. Most clinical supervisors supported two or three interns at a time.

### Ensured public health and safety

Many of the interviewed prevocational education supervisors commented that most interns were high achievers and would be successful in completing their training programmes regardless of the changes to prevocational training.

The general view was that early identification of interns who were having difficulty and how these were managed were the main way that changes to prevocational training was ensuring public health and safety.

Other changes such as improved quality of teaching and opportunities for placements in community settings were also thought to provide doctors with a broader set of skills.

A substantial proportion of interns considered they had to cope with problems beyond their competency (61% of PGY1 and 54% of PGY2). While the results were not conclusive, this seemed more likely to happen in smaller DHBs. However, in response to the survey, several interns commented that being in situations that stretched their skills also provided valuable learning opportunities.

# 1. The changes to prevocational training

Prevocational medical training (the intern training programme) spans the two years following graduation from medical school and includes both postgraduate year 1 (PGY1) and postgraduate year 2 (PGY2). Doctors undertaking this training are referred to as interns. All graduates of New Zealand and Australian accredited medical schools, and doctors who have sat and passed the New Zealand Registration Examination (NZREX Clinical) must complete prevocational medical training.

From November 2014, the Medical Council of New Zealand (Council) implemented changes to prevocational medical training. The outcomes Council aimed to achieve from the changes were:

- Greater accountability of training providers
- Increased opportunity for interns to obtain the broad-based core competencies needed for medical practice in New Zealand
- Improved vertical integration on the continuum of learning, and transition between medical school, prevocational training and vocational training
- Improved quality of learning for interns including:
    - Increased opportunities for all interns to work in community based and outpatient settings
    - Improved balance between service demands and training requirements
- Ensured public health and safety.

The changes put in place to achieve these outcomes were:

- The development of the New Zealand Curriculum Framework for Prevocational Medical Training (NZCF) to provide more structure to the educational objectives and outcomes. The curriculum framework covers five main areas: professionalism, communication, clinical management, clinical problems and conditions, procedures and interventions.
- An assessment framework to enable interns to reflect on their progress and record the attainment of the learning outcomes in the NZCF.
- An e-portfolio (ePort) to maintain an online electronic record of learning, track progress and record the skills and knowledge interns acquire during PGY1 and PGY2.
- Inclusion of PGY2 interns in the prevocational training programme. At the end of PGY2, interns must demonstrate through the information in their ePort that they have met the prevocational training requirements for PGY2 to have the endorsement on their practising certificate removed.
- Increased expectations of training providers through:

- Accreditation standards - Council accredits training providers (DHBs) that have demonstrated they meet Council's Standards for accreditation of training providers to deliver a two-year intern training programme
- Trained supervisors - As part of the implementation of the new prevocational medical training requirements, Council coordinated 29 workshops and trained over 900 CS.

## 2. The evaluation

In late 2014, Council commissioned a baseline data evaluation against which the outcomes of the changes to prevocational training could be assessed. An evaluation framework was developed based on MCNZ's logic model (Figure 1) and expected outcomes from the changes, a review of relevant documents and interviews with the key stakeholders. The evaluation framework set out the evaluation questions and measurable indicators of change.

The focus of the external evaluation was on the extent the intended outcomes had been achieved by the end of the third quarter of 2018.

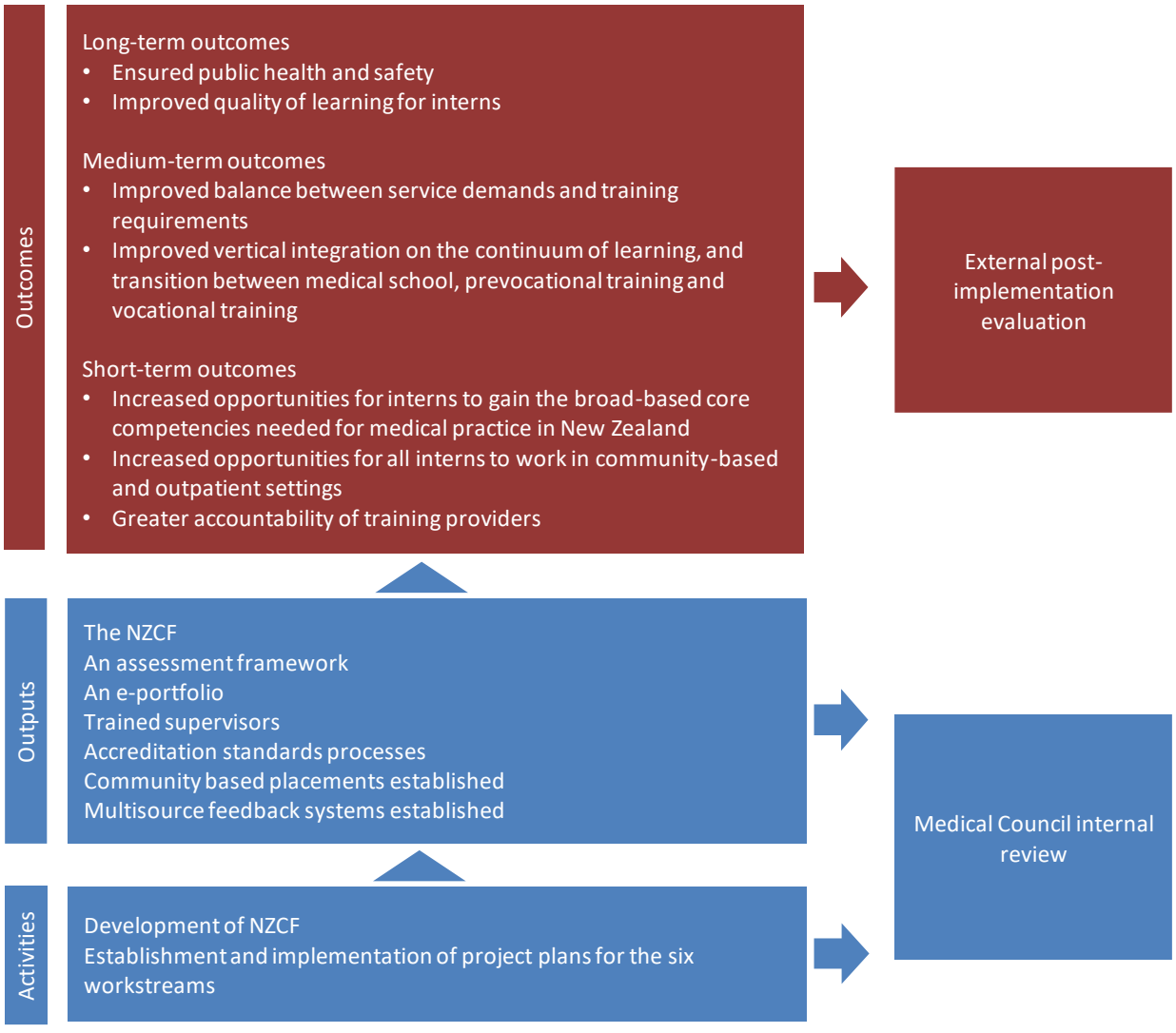


**Figure 1. The activities and intended outcomes from changes to prevocational training**

## 2.1. Information sources for the evaluation

The outcomes (follow-up) evaluation drew on data from a range of sources including interviews, surveys and analysis of ePort data (Table 1). The information sources aligned with the information sources for the baseline evaluation.

**Table 1. Information sources for the outcomes evaluation**

| **Interviews** | **Baseline** | **Follow-up** |
|---|---|---|
| Interns | 2 | 8 |
| Council working groups | 13 | |
| Prevocational education supervisors (PES) | | 13 |
| Chief medical officers (CMO) | | 3 |
| Clinical directors of training (CDT) | | 4 |
| RMO/METU unit managers | | 5 |
| DHB Chief Executives (CE) | 1 | 3 |
| Other stakeholders | 3 | |
| **Survey** | **Baseline** | **Follow-up** |
| PGY1 | 189/450 (42%) | 154[1] |
| PGY2 | 119/441 (27%) | 186[1] |
| **PGY1 & 2** | **308/891 (35%)** | **340/1126 (31%)** |
| CS | 239/629 (38%) | 501/1927 (26%) |
| Prevocational education supervisors | 50/60 (83%) | 72/121 (60%) |

## 2.2. Interviews

Interviews were conversational and guided by a semi-structured interview guide. The interview guide was developed to explore interview participants' views on the impacts of the changes to prevocational training on supervision and the competencies of interns, health and wellbeing, and any remaining challenges.

Interview participants were volunteers who responded to requests from Council and from the New Zealand Resident Doctors Association (NZRDA) to participate in interviews. An invitation email was sent to each person who volunteered. Follow-up phone calls were made to schedule interviews at a time and place to suit the

[1] The list of interns did not separately identify PGY1 and PGY2 interns.

participants. Interviews were able to be completed with almost all those who volunteered to be interviewed.

Detailed notes were taken from interviews and they were analysed to identify common themes and points of differences.

## 2.3. Surveys

In developing the surveys, where possible indicators and the wording of questions were drawn from published studies of trainee doctors' experiences.[2,3,4] Questionnaires consisted primarily of rating scales with some open-ended questions for respondents' comments.

Survey questionnaires developed for interns and for PES and CS were adapted for the outcome evaluation. Further questions were added to explore topics that were not relevant when the initial baseline data was captured in 2014, such as the use of ePort which had not at that time been implemented.

Questionnaires were distributed as online surveys. The survey included an introduction and concluding notes to provide participants with information about the purpose of the project and the survey, their privacy and the voluntary nature of their participation. The survey took participants an estimated 10 minutes to complete.

Online survey invitations were distributed using email address lists provided by Council. An invitation letter outlining the reason for the survey was signed by the Council chief executive.

An initial invitation was followed by two reminder emails. The NZRDA also communicated with members encouraging completion. A $100 prize draw was offered to interns as an additional incentive for participation.

## 2.4. Profile of survey respondents

Response rates for the outcomes evaluation were slightly lower than for the baseline evaluation. The main differences in the profile of respondents between the baseline and outcomes evaluation were:

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[2] Edler A, Piro N,Dohn A, Behravesh B. Using Resident Perceptions to Improve Educational Quality and Accountability, Stanford University

[3] Jalili M, Mirzazadeh A, Azarpira A. A Survey of Medical Students' Perceptions of the Quality of their Medical Education upon Graduation Ann Acad Med Singapore 2008;37:1012-8

[4] United Kingdom General Medical Council http://www.gmc-uk.org/education/surveys.asp

- A higher proportion of University of Otago graduates responded to the follow-up surveys
- A higher proportion of interns who identified as New Zealand European responded to the follow-up surveys.

**Table 2. Profile of intern survey respondents**

| Description | | Baseline | | Outcomes | |
|---|---|---|---|---|---|
| | | PGY1 n = 189 | PGY2 n = 119 | PGY1 n=154 | PGY2 n=186 |
| Gender | Female | 59% | 61% | 61% | 57% |
| | Male | 41% | 38% | 39% | 43% |
| Education | Otago University | 47% | 45% | 50% | 59% |
| | Auckland University | 41% | 41% | 32% | 33% |
| | Completed NZREX | 12% | 13% | 15% | 6% |
| | Australian medical school | 1% | 1% | 3% | 2% |
| Age | Mean | 28 | 28 | 28 | 28 |
| Ethnicity<br><br>Note: respondents could select multiple ethnic groups | NZ European | 51% | 52% | 63% | 67% |
| | Māori | 9% | 8% | 7% | 14% |
| | Cook Island Māori | 2% | 0% | 2% | 1% |
| | Samoan | 1% | 2% | 2% | 2% |
| | Tongan | 1% | 1% | 1% | 1% |
| | Chinese | 15% | 13% | 12% | 9% |
| | Indian | 7% | 8% | 7% | 9% |
| | Other | 28% | 26% | 21% | 19% |

## 2.5. Statistical analysis

Survey data were analysed using descriptive statistics. The Mann-Whitney U statistical test used to assess the statistical significance of differences between baseline and current groups of supervisors and interns. The Mann-Whitney U test is a rank-based nonparametric test that can be used to determine if there are differences between two groups on a continuous or ordinal dependent variable (such as those used in this evaluation). Differences were considered significant if $p < 0.05$.

The percent difference between baseline and outcomes evaluation responses which were statistically significant varied by question as it was based on the overall

variation within the scales used. Further t-tests were also used to examine the difference in means and results were similar.

## 2.6. ePort data

The ePort data for interns' goals, placement assessment and placement meetings were analysed using descriptive statistics and are reported in tables throughout the report. Data from ePort were analysed by year from 2015 to the end of the third quarter of 2018. Some data sets to the end of the third quarter of 2018 were incomplete. Conclusions drawn from 2018 data must consider the incomplete third quarter data and the lack of data for the final quarter.

## 2.7. Strengths and limitations

The outcomes evaluation was based on comparisons with baseline data collected just prior to implementation of the changes to prevocational training. Survey data were complemented with information from in-depth interviews to provide context to the survey findings. As with many evaluations, reliance was placed on participants' recalled opinions and reflections about prevocational training.

Data from ePort provided some objective measures for the follow-up evaluation and were compared to reported measures collected in the baseline survey, such as the number of times CS met with interns and whether interns had professional development plans (PDP).

The response rates for the follow-up survey were slightly lower than for the baseline survey. The denominator for the CS survey was drawn from the list provided by Council, however there may have been some supervisors included on the list who were not supervising interns at the time of the survey.

We have no information that allowed a comparison to be drawn between responding and non-responding supervisors or interns. However, we received responses to the survey from supervisors and interns across all DHBs, with different gender and ethnic profiles and working in different speciality areas.

The timing of the baseline and follow-up surveys differed and this may have influenced some findings such as interns' self-assessments of the competencies they had achieved. The baseline survey was distributed near the end of the year and had the disadvantage of challenges in contacting interns who changed DHB and email addresses at the end of the year. A lower response rate to the baseline survey was achieved for PGY2 interns. The follow-up survey was distributed at the end of the third clinical placement of the year, with the aim of reaching PGY2 interns before they moved to another location at the end of their training.

# 3. The foundations for change

Although the evaluation focussed on the outcomes achieved by the changes to prevocational training, we also explored the main activities underpinning the changes.

## 3.1. An assessment framework

Intern assessment was on the job and multi-facetted and based on a high level of trust that assumes that nearly all interns will exceed the minimum levels of competence. The assessment framework includes a list of learning outcomes. Interns must record they have attained at least 75% (279) of the learning outcomes by the end of PGY1 and 95% (354) by the end of PGY2.

**Key findings**

- Some PES and CS were positive about the concept of an assessment framework as setting minimum expectations of required skills and competencies.
- One-quarter to one-third of PGY1 and PGY2 strongly agreed or agreed with the benefits of the assessment framework.
- However, almost all PES, CS and interns considered the current framework too detailed and that it included learning outcomes many interns would not get exposure to and therefore could not learn. The length of the list, difficulty in noting specific dates when learning outcomes were achieved, and lack of audit all contributed to many interns not using the framework as intended. Supervisors and interns frequently described completing the learning outcomes as a 'tick-box' exercise.

Many interviewed PES were positive about the concept of a competency framework and saw it as potential mechanism to establish minimum standards. In response to the survey approximately half PES and CS strongly agreed or agreed the competency framework helped them to understand what was required by interns (Figure 2).

*I think nationwide [prior to the changes to prevocational training] there was not a proper curriculum framework that ensured minimum standards were met. (PES)*

*The competency framework is well intentioned and a good idea. (PES)*

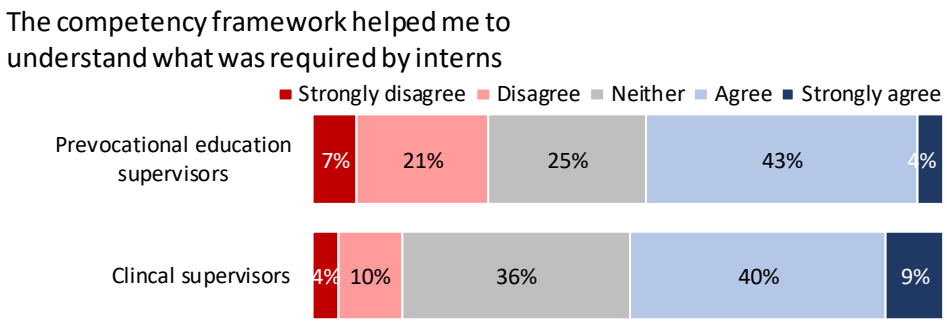


**Figure 2. Supervisors views about the competence framework (PES n=72; CS n=465)**

However, many PES and CS considered the assessment framework was too long, not directly aligned with the five competencies and included a mix of skills and professional behaviours.

> *I think that having a curriculum framework is really helpful although I question having 360 odd learning outcomes. I think that's probably content rather than learning outcomes … linking up those learning outcomes with the ePort system is a bit ad hock. .., just a tick box exercise. In terms of the education value of that, it's probably too wide ranging to get some good depth in thinking about particular skill sets. (RMO)*

Most PES and CS thought interns were not using the list of learning outcomes as intended and there were challenges for some interns who would not have the opportunity to observe or develop some of the learning outcomes. The adult learning approach and the lack of audit of whether learning outcomes had been achieved contributed to perceptions of it as a 'tick box' exercise.

> *The number of competencies is of no benefit to us – makes us like policemen… Ticking them off doesn't make them competent in it...Maybe it forces interns to think about some things such as health literacy etc (PES)*
>
> *It's not being used properly by the interns to enable that skills framework. The majority of interns see it as tick box (they do them in bursts) rather than as reflective learning. (PES)*
>
> *But people just don't see some skills. Does it make you a better doctor to have done all that? I wonder. There's even one like noticing your colleague has an addiction problem. It's too much, overwhelming, so it just turns into a tick thing. (PES)*
>
> *They get stressed about the list in the competency framework. It's a box ticking exercise… The intense ones get way behind on it. The relaxed ones just tick them. (PES)*

Interns had mixed responses to the survey when asked about the extent the NZCF helped them understand what was required and keep track of the learning outcomes they needed to achieve (Figure 3). Approximately one-third of PGY1 and PGY2 interns agreed or strongly agreed that the NZCF helped them to understand what was required. Fewer, approximately one-quarter were positive about the extent to which the NZCF helped them keep track of the competencies they needed to achieve.

*The tick-box exercise with your 330 goals, I'm really not a fan of. It's a bit ridiculous. It is just a tick-box exercise. I personally just sat down one evening with a beer and just ticked everything and gave no thought to it whatsoever. I think it's a very bad way to run it, simply because there's just so much. You start with the best intentions and you think about it and you write some things for each of the boxes, but you quickly realise if you do that for every single one, you've just wasted a lot of time … I have achieved cultural competency on the 14 of May. I just thought it was a bit ridiculous. My personal thoughts on the matter are that I think it would be much more useful to have sort of a limited set of focused goals for individual ones. (Intern)*

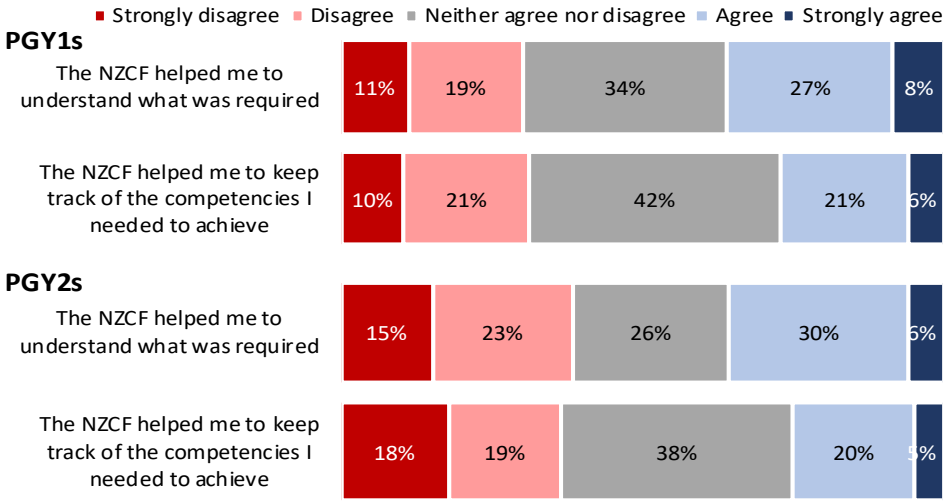


**Figure 3. Interns' views on the NZCF (PGY1 n=154; PGY2 n=186)**

Comments about the NZCF learning outcomes were the most frequent responses to an open-ended question in the interns' survey about the least effective aspect of vocational training (66 interns). Comments related to:

- The numbers of items

  *The NZCF log is a waste of time. No one is able keep up to date with it as they achieve those hundreds of learning outcomes so just end up making up dates and ticking them off in bulk without gaining anything from the process. (Intern – survey response)*

- The type of items

  *ePort as it was a tick box exercise especially around communication and doctor and society. When can you claim you have expressed enough empathy to tick the box? It's very vague. It's more appropriate for procedures. (Intern – survey response)*

- Lack of opportunities to experience required skills and learning outcomes

  *… you may not have any experience in or opportunities to experience throughout your two years (e.g. obstetric emergencies, eye problems). (Intern – survey response)*

- Overlap with professional college requirements

*Having to do ePort. I am currently registered with the Royal Australasian College of Physicians which has doubled the paperwork by meeting their requirements plus ePort. The requirement to do ePort as well, which was only introduced this year, is pointless. (Intern – survey response)*

### 3.1.1. Opportunities for improvement

There was support from supervisors and interns for the concept of a framework but there were opportunities to strengthen the current framework to respond to feedback. Options suggested by those we interviewed included:

- Clarifying the balance between skills and professional competencies

  *… Because we've got communication, professionalism, procedures and interventions, clinical problems and clinical management in the curriculum and writing and actually learning the outcomes for each of those would probably be more beneficial than a list of complaints or conditions. (Senior clinician)*

- Reducing the number of items in the list of learning outcomes

  *Some of them don't need to be ticked off as postgraduates. They could be ticked off and should be ticked off as undergraduates as well. I don't think you should be graduating and not being able to put in an IV line and not being able to do urinary catheters. That's not really something you should be learning as a postgrad. (Intern)*

- Clinical reviews of skills

  *… I wonder if there would be more merit in doing clinical reviews of the skills. More like the registrars where they are observed and given feedback. There's too many. We just look to see what they've done, we don't supervise it. (PES)*

- A small number of learning outcomes to support meaningful reflective learning.

  *Interns just go through and tick it anyway to meet Council criteria as they have to do it… They do self-reflect anyway based on experiences from hospital exposure... (PES)*

It is noted that a separate, but relevant piece of work is underway to review the current NZCF model and that a number of changes are likely to be made as a result of this work. Feedback from interns, PES and CS will be captured and considered as part of the review process.

## 3.2. E-portfolio

An online tool, ePort, was used by interns to record their learning and track their progress. Every intern had their own ePort account that allowed them to record the NZCF learning outcomes they attained, create and update their PDP, record professional development activities and view their assessments. PES could access the ePort of interns they supervised to record feedback and provide educational support. CS could access the ePort of the interns they supervised, for the duration of

supervision, to provide feedback on performance and progress and complete assessments. CS record start, mid and end of attachment meetings in ePort and could see an intern's progress on previous clinical attachments.

**Key findings**

PES provided positive feedback about ePort and the extent ePort had:

- Increased transparency and visibility of an intern's progress and the CS records of engagement with the interns
- Enabled earlier identification of interns who might be struggling
- Provided PES with information to identify and provide feedback to CS as part of a continuous improvement process.

CS were less positive about ePort.

In interviews, PES, CDTs and SMOs were positive about the value of ePort. Many noted it had taken time for clinicians to get used to ePort but that largely it was now considered to be business as usual. In response to the survey, 71% of PES and 67% of CS strongly agreed or agreed that ePort was easy to use (Figure 4).

*eport makes it easier in some ways but more onerous in that [CS] need to do it…No one knew they weren't doing it before. (RMO unit manager)*

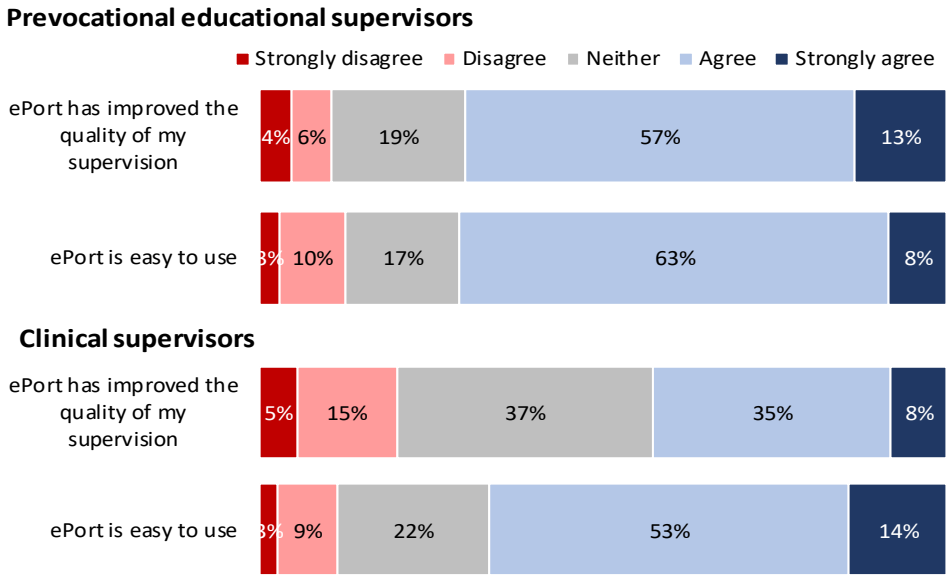


**Figure 4. Survey respondent's views about ePort (PES n=67-72 ; CS n=447-468)**

Use of ePort had provided PES with visibility about the clinical supervision that was taking place. They considered that there was improved transparency about the extent to which the CS were meeting with interns at the start, midpoint and end of the clinical attachments.

*The current advantage of ePort is it forces people to do it and talk about it …Talk about what they have done in previous runs and develop plans with interns…It makes RMOs and CS do these things. (PES)*

*ePort has improved this. It has mandated discussions…Required CS to chase interns up and have the meetings. (PES)*

*Electronic availability makes it easier to see who is getting assessments done and appropriate feedback is more likely to be given in a timely fashion as it's a required field. (PES)*

Use of ePort provides PES and CS with information about previous attachments.

*Now in the third quarter, we can see two previous rotations and comments from interns and consultations. That transparency is really, really helpful. (PES)*

There were substantial increases between the baseline and follow-up surveys in the proportions of PES and CS who considered they had sufficient information to assess interns' strengths and development needs, and to assist interns in setting goals.

Although no baseline information was collected for PGY2 because they were not included in the prevocational training programme at the time, higher proportions of PES and CS considered they had sufficient information about PGY2 interns than they did about PGY1 interns.

In interviews, PES were positive about the benefits of additional information about previous attachments in identifying and responding to interns facing challenges.

*Overall, the idea of an ePort is a hugely positive thing. Sets the minimums and creates visibility. For example, if I have an intern who comes to me, I can look back and see what their last supervisor said. What were their upsides and downsides, what did they do well in, what do they need… Previously, unless they were failed or particularly flagged, it wouldn't necessarily get to me. Things could get missed. (PES)*

*[ePort] more formalises the process in an electronic way rather than bits of paper being shuffled around. … Mid-run feedback, beginning of run feedback, don't always happen as well as they should. It makes it clear to the intern if they have just completed the run and the supervisor thinks there's areas of development, they can be made objectives for the next run. Identifies the learning needs for the next run. The new system has made it clearer. (PES)*

However, there were still some CS who continued to feel they did not have all the information they needed to identify an intern in difficulty.

**Table 3. PES and CS views on the information they have from ePort (Baseline PES n=42; CS n=229-230) (Follow-up PES n=61-62; CS n=377-380)**

| Key outcomes | | Baseline | | Follow-up | |
|---|---|---|---|---|---|
| | **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| PGY1 | Supervisors have sufficient information to assess interns': | | | | |
| | • Areas of strength | 21% | 8% | **31%** | **25%** |
| | • Areas requiring further development | 21% | 10% | **31%** | **30%** |
| | Supervisors have sufficient information to assist interns to set goals that focus on their learning needs | 40% | 25% | **55%** | **49%** |
| | Supervisors have sufficient information during clinical attachments to: | | | | |
| | • Identify interns having difficulty | 63% | 63% | 68% | **49%** |
| | • Manage interns having difficulty | 56% | 45% | 68% | 40% |
| | | | | | |
| PGY2 | Supervisors have sufficient information to assess interns': | | | | |
| | • Areas of strength | | | 82% | 44% |
| | • Areas requiring further development | | | 77% | 43% |
| | Supervisors have sufficient information to assist interns to set goals that focus on their learning needs | | | 83% | 58% |
| | Supervisors have sufficient information during clinical attachments to: | | | | |
| | • Identify interns having difficulty | | | 78% | 56% |
| | • Manage interns having difficulty | | | 83% | 48% |

As well as providing information about interns, the interviewed PES described how the additional information available through ePort had helped them to monitor clinical supervision. For example:

- PES could see which CS were not meeting with interns and could respond with conversations with CS
- PES could see the type and depth of feedback provided by CS to the interns on their clinical attachments. As part of a continuous improvement process, they could meet with CS and discuss how to provide effective feedback.

In interviews, PES commented that ePort provided them with the tools for continuous improvement but that responding to identified challenges and improving the quality of CS feedback about interns was in the early stages.

> *There is better visibility of "holes" and what they are learning…We have the ability to patch the holes. (PES)*

Interns were less positive about ePort with 53% of PGY1 interns and 54% of PGY2 interns strongly agreeing or agreeing that ePort was easy to use.

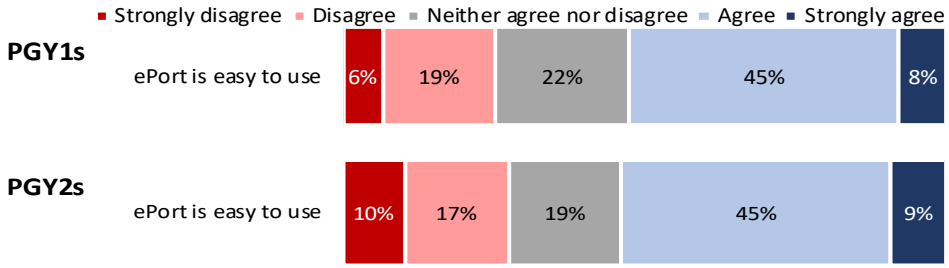


**Figure 5. Interns' views about ePort (PGY1 n=154 ; PGY2 n=186)**

At the time of the follow-up survey, Auckland graduates were introduced to ePort as undergraduates. Interns responding to the survey who were Auckland graduates were significantly more likely to agree ePort was easy to use (Figure 6).

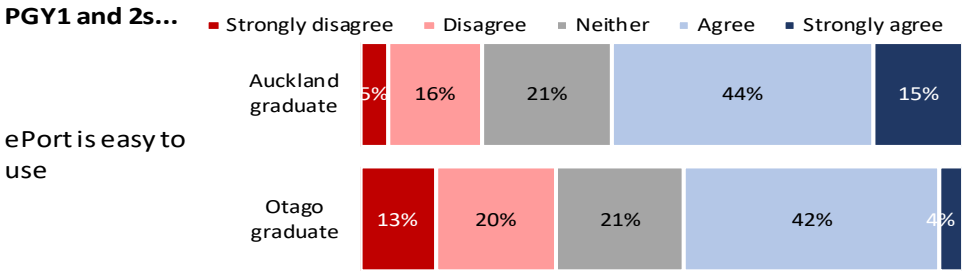


**Figure 6. Interns' views about ePort by training provider (Auckland n=110; Otago n=186)**

It was clear from interviews with interns that they saw ePort and the assessment framework and list of learning outcomes as one and the same thing. Negative comments in response to the survey may reflect interns' views about the assessment framework rather than ePort.

> *I guess I sort of mentioned that the tick-box thing maybe wasn't as beneficial for the amount of time that it takes to go through it, but as I said it does have its benefits still, as with probably most aspects of ePort and of the supervision requirements – you can kind of make it as beneficial as you want to a certain extent, so it's not all bad. (Intern)*

> *While I think the check-list/log on ePort is a helpful list to have in mind, it is very difficult to pin down that 'yes, on this day, I did this thing', so the actual act of ticking things off felt rather ineffective. It was reassuring, however, to look at the list and think that I had encountered most of the required experiences. (Intern – survey response)*

> *eport has probably been the least helpful part of my training. It is clunky, difficult to use, time consuming and most importantly ticking off objectives has no direct benefit to learning. The MCNZ should think of ways to facilitate good 'on the job' learning or provide mechanisms through which PGY2s receive protected formal teaching (this has been minimal)... (Intern – survey response)*

### 3.2.1. Opportunities for improvement

The main comments about opportunities to improve ePort related to access to ePort information. Two PES noted challenges because only vocationally registered CS could have ePort logins.

A few PES, particularly in larger DHBs commented in interviews that an indirect effect of ePort was a reduction in contact with interns.

> *The electronic base is easier than the paper assessment…But it has meant PGY1s and 2s don't have to come and find you now. Direct contact has decreased…They don't have to look you in the eye now…It's more difficult to sit down and meet with them. It disengages the two parties. (PES)*

RMO unit managers identified a tension between employment (human resources issues) and training, as they had responsibilities for the interns as their employer, including performance management and pastoral care responsibilities. Prior to ePort, RMO unit staff had been able to see the paper copies of clinical supervision reports and had relied on these for employment information and to identify interns having difficulty. For some RMO units, it was a matter of trusting that processes were in place for others such as the PES to identify and respond to interns having difficulty.

> *There is always tension between employment and training… we now have a great system and portfolio from a training perspective, but we can't access it from an employment perspective. This means you have to double up on processes and information…Historically we had end of run assessments on paper and they kept them on the RMO's file. We could know if there was an issue…It is now on ePort and captured well but RMO managers don't have access. (RMO unit manager)*

> *SMOs don't like to do two sets of performance appraisals. Before we put the information on their files. Now SMOs won't do another form for HR so we have lost that oversight. (RMO unit manager)*

## 3.3. Professional development plans

**Key findings**

- Interns were consistently using ePort for PDP planning and an average of approximately nine goals was recorded per intern.
- PDPs for both PGY1 and PGY2 interns were being consistently discussed with PES and CS at the start and end of clinical attachments.

Interns were required to develop and maintain an appropriate PDP for guiding their learning. ePort was developed as the platform for recording interns' goals and their discussions about these and progress in their learning with their CS. In response to the survey, most PES and CS reported they set and discussed development goals

with PGY1 and PGY2 interns at the start and end of their clinical attachments (Table 4). The proportion of PES who set goals with PGY1 interns had significantly increased from the baseline survey. The PDP provided a foundation for *'constructive, productive conversations'*.

**Table 4. The extent professional development plans were set and discussed for PGY1 and PGY2 interns (Baseline PES n=41-42) (Follow-up PES n=62-63; CS n=364-365) Note: information about PDP planning for PGY2 was not applicable in the baseline survey.**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| Professional development goals are set with all or most interns at the start of their clinical attachment/PGY1 | 76% | - | **95%** | 88% |
| Professional development goals are discussed with all or most interns at the end of clinical attachments/PGY1 | 81% | - | **97%** | 87% |
| Professional development goals are set with all or most interns at the start of their clinical attachment/PGY2 | - | - | 92% | 84% |
| Professional development goals are discussed with all or most interns at the end of clinical attachments/PGY2 | - | - | 94% | 85% |

In interviews, PES generally supported the value of a PDP for PGY2 interns but also noted that some struggled with developing them.

> *Making a PDP is a good idea. It stops them drifting around without a plan – even if they don't do it well. (PES)*

> *They consider themselves as being educated and are not taking ownership and coming up with their own plans and identifying why they need to do that and move to being a professional. (PES)*

In response to the survey, most PGY1 and PGY2 interns also reported developing professional development plans in ePort (Table 5) and discussing them with their PES or CS.

**Table 5. The proportion of PGY1 and PGY2 interns responding 'yes' to questions about professional development planning (Follow-up PGY1 n=154; PGY2 n=186)**

| Key outcomes - interns | PGY1s | PGY2s |
|---|---|---|
| I developed a professional development plan in ePort | 85% | 89% |
| I discussed my PDP with a CS or PES | 91% | 93% |

*Last year I was. I think I've gotten a bit more lazy with it this year. I do kind of use it... I guess I don't really notice it because I update it at the start of every run. Yeah, I guess I have been … I'll sort of make it in the middle of the run, look at it, and then make sure I've actually done what I was planning to do, and if I haven't, try and do it and then see if I have. (Intern)*

*I usually do a little bit of study before starting with a run and thinking about what it is I want to learn, and then when I start the registration I'll talk to my registrar and I might see what opportunities there are for me. (Intern)*

*I think I started it. I think I've got one or two things on there. … It could potentially be a good thing to have, but rather than that, I've just chosen to regularly update my CV and I figure I'll just transfer that onto a college page when I sign up to a college... I haven't used it to its maximum extent. (Intern)*

The number of goals per year recorded in ePort for each intern was similar over the past four years, with the average being close to nine goals set in each year with seven to eight goals being completed within that year. The mean time taken for interns to complete a goal varied from 178 days in 2015 to 113 days in 2017.

**Table 6. Goals created by interns (Source: ePort 2015 n=778, 2016 n=1168, 2017 n=1317, 2018 n=1001)**

| | Average # goals | Average goals completed/ year | Average days to complete a goal |
|---|---|---|---|
| 2015 | 10.5 | 9.3 | 178 |
| 2016 | 9.1 | 7.9 | 146 |
| 2017 | 9.0 | 7.0 | 113 |
| *2018 – part year*[5] | *8.9* | *4.7* | *73* |

### 3.3.1. Opportunities for improvement

Few suggestions were provided about opportunities to improve the PDP, but a few PES suggested Council could provide more guidance about what could go into a PDP as a starting point for interns.

[5] Data only up to end of July 2018.

# 4. Short-term outcomes

## 4.1. Greater accountability of training providers

**Key findings**

- Many PES considered the accreditation process had made it easier for them to make changes to improve educational processes.
- In the follow-up survey, an increased proportion of CS reported they felt supported in their educational role. However, still only 27% agreed or strongly agreed they were supported in their educational role by their DHB.
- There is now supposed to be a maximum of 10 trainees allocated to each PES. At the time of the survey, most PES supported 6-10 interns but 31% said they supported more than 10. Most CS supported two to three interns.
- There was an 8% increase between the baseline and follow-up surveys in the proportion of CS who considered their workload allowed adequate time for their teaching roles. However, while the percentage had increased, 46% disagreed or strongly disagreed their workload allowed adequate time for supervision. CS who were surgeons were less likely to agree they had enough time to adequately prepare for their teaching roles.

Prevocational medical training providers (DHBs) that have demonstrated they meet Council's Standards are accredited to deliver a two-year intern training programme. Council accredits training providers who have:

- Structures and systems in place to ensure interns have sufficient opportunity:
    - to attain the learning outcomes of the New Zealand Curriculum Framework for Prevocational Medical Training (NZCF), and
    - to satisfactorily complete the requirements for prevocational medical training over the course of PGY1 and PGY2
- An integrated system of education, support and supervision for interns
- Individual clinical attachments that meet Council's accreditation standards and provide a breadth of clinical experience and high-quality education and learning.

Some of those interviewed considered the changes to prevocational medical training and the accreditation process had raised the profile of teaching.

*There is more awareness of DHB role in education and acceptance that the DHB has to provide training and not just services. (RMO unit manager)*

Interviewed PES said the accreditation standards had improved the ease of creating PES roles.

*The accreditation process has been tightened and evidence formalised. It has improved hospital structures … Given us power to improve process… Demonstrated that training is a responsibility. (PES)*

*The standards are really helpful as a lever. (Senior clinician)*

The training committees required for accreditation[6] were providing a forum for discussions and continuous improvement.

*The training committee is a requirement for accreditation … The training committee includes house officers as well. It's quite a healthy way to look into the issues ...We understand things better and get trainee input as well. (Senior clinician)*

A few interviewed PES and senior clinicians emphasised the importance of all DHBs having the same standards and said they considered there was still variation between DHBs.

### 4.1.1. Training providers support for educational roles

There were significant increases in the proportion of CS who felt supported in their educational role by other clinical staff and DHB management. There was no difference in the proportion of interns who felt the DHB valued their educational role.

[6] Some DHBs had training committees prior to the changes to prevocational medical training.

**Table 7. The extent PES and CS feel supported in their educational role (Baseline PES n=41-43; CS n=228-231; PGY1 n=189; PGY2 n=117)(Follow-up PES n=70-71; CS n=495-497; PGY1 n=152; PGY2 n=185-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| Agree their educational role is valued by their DHB | 72% | 32% | 67% | 39% |
| Feel supported in their educational role by: | | | | |
| • DHB management | 49% | 19% | 56% | 27% |
| • Other clinical staff | 81% | 57% | 65% | 68% |
| • The RMO Unit | 71% | 35% | 83% | 34% |
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Agree the DHB values their education role | 63% | 49% | 58% | 48% |
| Feel supported by the RMO/METU Unit | 40% | 52% | 41% | 45% |

However, the proportion of CS who felt supported by DHB management was still relatively low. Of note is the proportion who disagreed or strongly disagreed they were supported in their educational role (Figure 7).

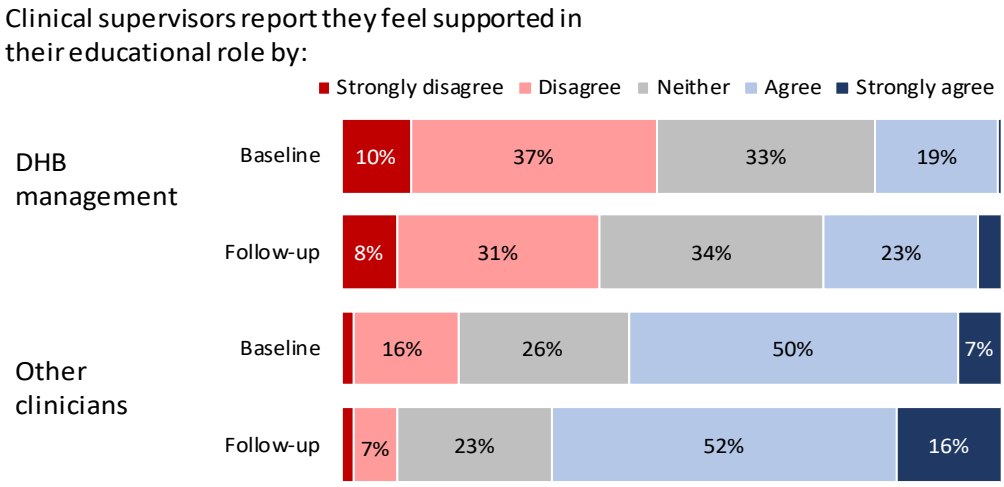


**Figure 7. The extent PES and CS feel supported in their educational role (CS Baseline n=228-230; Follow-up n= 491-495)**

Workloads remained an issue for CS. There was an 8% increase between the baseline and follow-up surveys in the proportion of CS who considered their workload allowed adequate time for appropriate supervision/assessment/teaching for interns (Figure 8). However, 46% still considered their workloads limited the extent they could provide appropriate supervision.

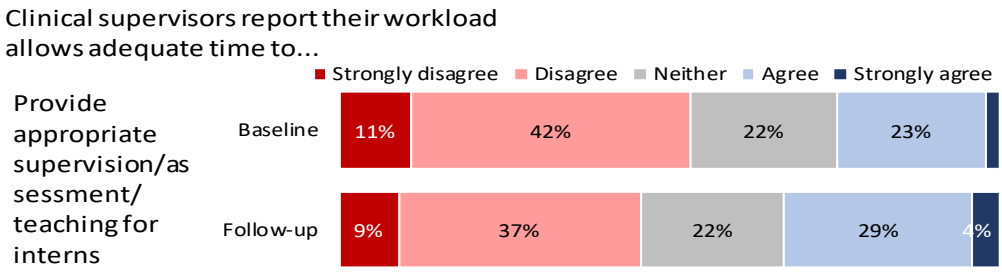


**Figure 8. The extent CS considered their workload allowed adequate time for interns (Baseline n=231; Follow-up n=497)**

In the follow-up survey, CS who were surgeons were less likely to agree they had enough time to adequately provide supervision/assessment and teaching to interns.

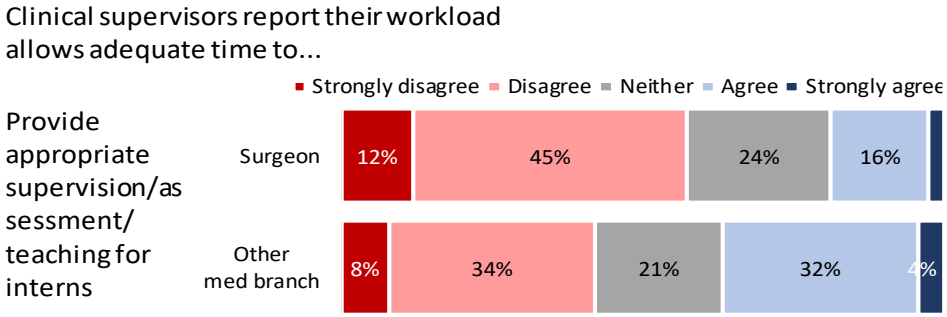


**Figure 9. The extent CS considered their workload allowed adequate time for interns by medical branch (Follow-up only Surgeons n=117; other medical branch n=380)**

### 4.1.2. PES and clinical supervisor workloads

The number of trainees per PES is now set at a maximum of 10 interns each. At the time of the survey, most PES supported 6-10 interns but 31% said they supported more than 10. Most CS supported two to three interns (Figure 10).

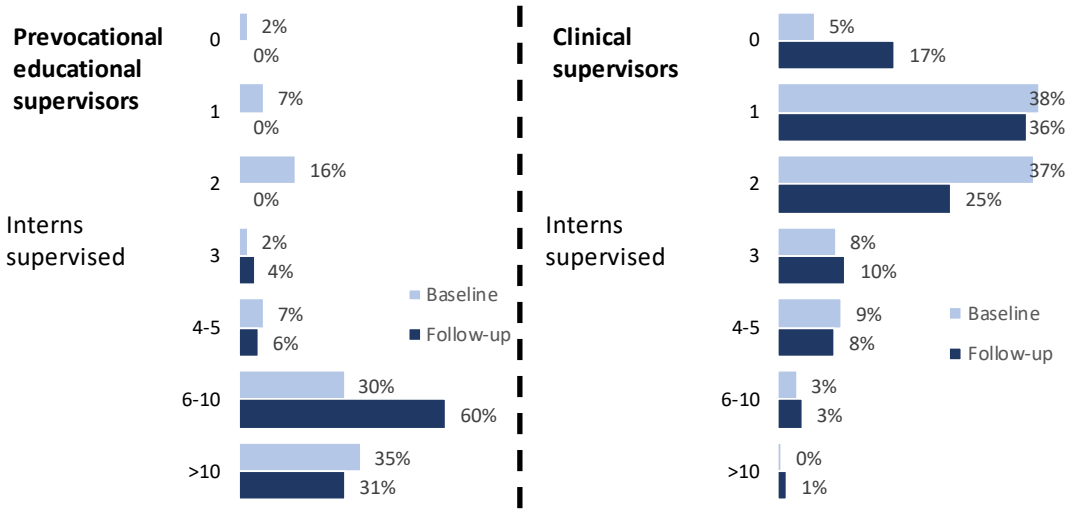


**Figure 10. Number of interns supervised (Baseline PES n=43; CS n=231; Follow-up PES n=72; CS n=494)**

Most PES were contracted for four hours per week for their educational role and two-thirds completed most of their work within this time (Figure 11). Most CS did not have specified contracted hours for supervision. Three-quarters said they spent between one and five hours per week on tasks related to intern supervision.

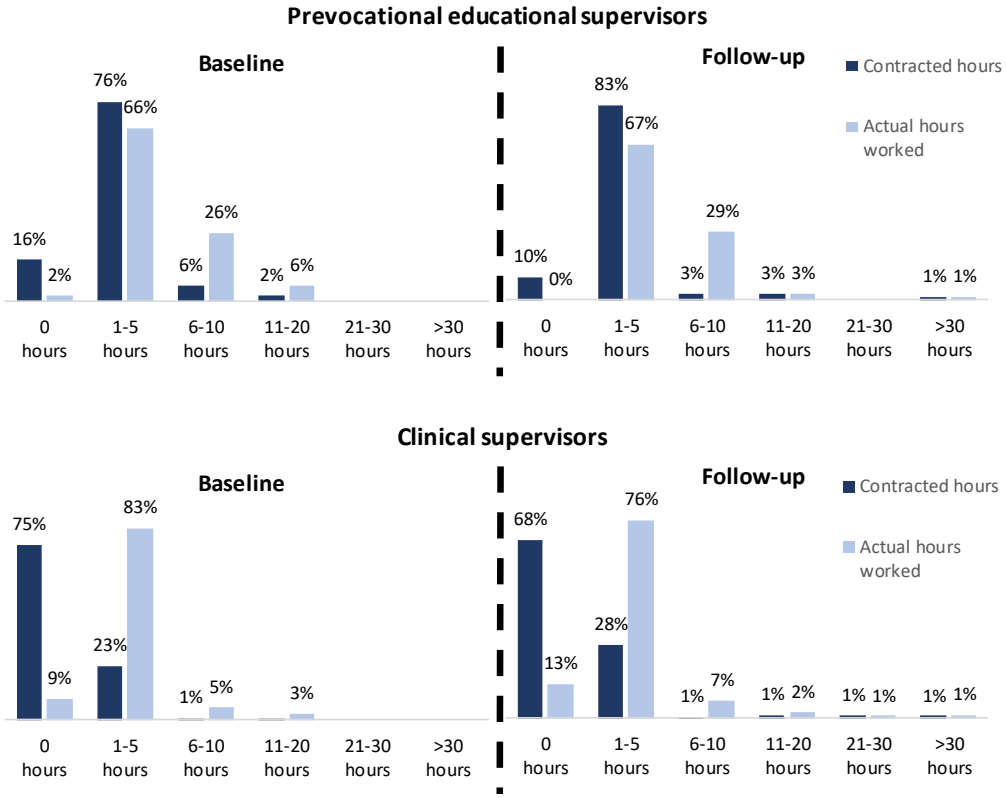


**Figure 11. Contracted and actual hours worked conducting educational activities (supervision/ assessment/ teaching) of interns? (Baseline PES n=50; CS n=239)(Follow-up PES n=72; CS n=486)**

## 4.2. Increased opportunities for interns to gain broad based competencies

**Key findings**

- There were no increases in interns' perceptions of the competencies they achieved. Interviewees considered most interns did well and achieved their competencies.
- However, interview feedback focused on improvements likely to arise for a minority because of:
  - early identification of interns who were struggling
  - improved processes to improve education delivery and experience.
- In both the baseline and follow-up surveys, a smaller proportion of interns considered they had achieved competency in procedures and interventions than in other competency areas.

The baseline survey was completed at the end of the final clinical attachment. The follow-up survey was completed at the end of the third clinical attachment. The different timing of the surveys may explain the decreased proportions of interns who felt they had achieved skills in different areas (Table 8).

In both the baseline and follow-up surveys, a smaller proportion of PGY1 and PGY2 interns considered they had achieved the skills they needed in procedures and interventions, compared with other competencies. Comments in interviews suggested more limited exposure to procedures and interventions by interns on surgical attachments than on medical attachments.

**Table 8. Interns' perceptions of the skills and competencies they have achieved (Baseline PGY1 n=188-189; PGY2 n=119) (follow-up PGY1 n=150-154; PGY2 n=184-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Interns agree they have gained enough experience for their stage of training | 75% | 83% | 76% | 72% |
| Interns have developed the skills they need to practice as a doctor in: | | | | |
| • Professionalism | 85% | 73% | 76% | 72% |
| • Communication | 88% | 71% | 76% | 75% |
| • Clinical management | 81% | 84% | 77% | 74% |
| • Clinical problems and conditions | 84% | 85% | 77% | 77% |
| • Procedures and interventions | 49% | 59% | 51% | 52% |

## 4.3. Opportunities to work in community-based attachments

**Key findings**

- CBA had been experienced by 30% of interns and over 80% strongly agreed or agreed that the CBA had been a positive learning experience.
- PGY2 interns who had completed a CBA were significantly more likely to agree they were prepared to provide healthcare in the community, understood about what community specialities do and had a better understanding about the primary and secondary interface.
- Interviewed PES were generally positive about the addition of CBA. They attributed them to broadening interns' perspectives and attracting some to consider general practice as a career.
- There were ongoing challenges in finding placements, especially in general practice.

- Interns placed in community settings have generally been volunteers and attitudes may change for non-volunteers and more issues may arise as community placements become a requirement. There was the potential for loss of income for interns who were not given overtime during community placements.

The inclusion of a CBA as one of the interns' rotations is gradually being phased in with the expectation that by 2020, all interns will complete at least one CBA during their two prevocational years. In response to the survey, 4% of PGY1 and 30% of PGY2 interns said they had completed a CBA. Over 80% strongly agreed or agreed that the CBA had been a positive learning experience (Table 9).

*Absolutely. The only challenge is how to get enough of them to go around. They are beneficial for the GPs as well. Positive feedback – they have an intern who's enthusiastic, just come from hospitals so they bring some learning for the GP too. (PES)*

*Community placement attachment, good learning for PGY1 and 2, quality project very beneficial. (Supervisor – survey response)*

*.. DHB very slow at instituting community placements - would love this to happen as community oriented in my future goals (Intern – survey response)*

**Table 9. Community attachments completed by interns (Baseline PGY1 n=188; PGY2 n=116) (Follow-up PGY1 n=153; PGY2 n=186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Interns with clinical attachments in CBA | 4% | 11% | 4% | **30%** |
| Of interns who had CBA: Positive learning experiences in community-based clinical attachments (note: small numbers prevented significance testing) | 63% | 85% | 83% | 85% |

Interviewed PES were generally positive about the addition of CBA. They attributed CBA to broadening interns' perspectives and attracting some to consider general practice as a career.

*RMOs enjoy the runs. They get good experience, learn about themselves and GP land…There are different decisions…The community placements are extraordinarily helpful and generate potential GPs…Some slight anxiety about what they are getting…safety of supervision. (PES)*

*It gets them into the real world and links practice to the tertiary care centre. (RMO manager)*

*I did a GP run, and it was kinda one of the deciding factors on being a GP was because I was kind of seeing how it was going, and your supervisor is the GP you are attached to*

*you can see them all the time and chat to them and you're pretty well supported in that regard….by the end of you were just seeing patients and dealing with them sometimes if it's the basic stuff without having to get the GP and wait every time. It was quite good for growing overall as a professional. (Intern)*

As only a small percentage of interns had completed a CBA, when all interns were considered there were no measurable differences overall in interns' preparedness to provide healthcare in community settings, or their understanding of community specialties and the interface between primary and secondary care (Table 10). This is likely to change over time as more interns complete CBAs.

**Table 10. Interns' self-assessed preparedness to work in different settings (Baseline PGY1 n=187-189; PGY2 n=118-119)(Follow-up PGY1 n=150-154; PGY2 n=184-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Interns are prepared to provide healthcare to people in: | | | | |
| • A hospital setting | 92% | 93% | 90% | 86% |
| • A community setting | 19% | 33% | 26% | 30% |
| Interns report they understand: | | | | |
| • What hospital-based specialities do | 88% | 90% | 86% | 91% |
| • What community-based specialties do | 20% | 35% | 24% | 36% |
| • The interface between primary and secondary care | 48% | 58% | 56% | 48% |

However, PGY2 interns who had completed a CBA were significantly more likely to agree they were prepared to provide healthcare in the community, understood what community based specialities did and had a better understanding about the primary and secondary interface (Figure 12).

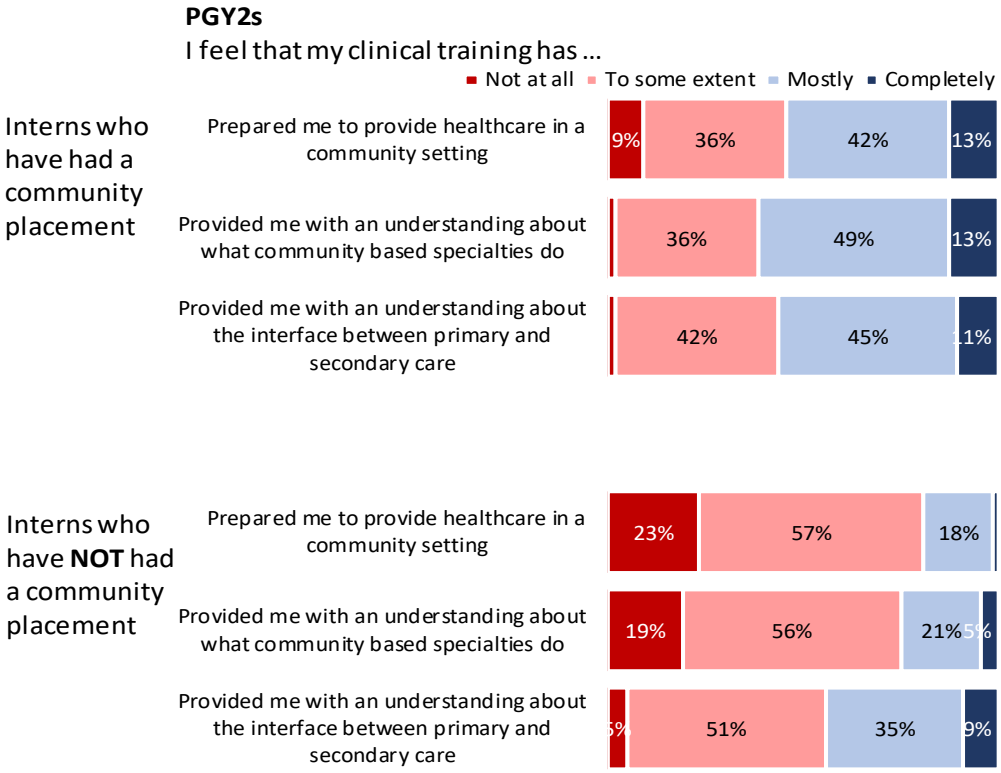


**Figure 12. Interns self-assessed understanding and preparedness for community practice (Follow-up PGY2: community placement n=55; no community placement n=131)**

The following challenges to setting up community placements were identified:

- Challenges in finding general practice placements, although CBAs could also be undertaken in community mental health, hospice care, public health and other similar community health settings. There were different expectations between some PHOs and DHBs about funding community placements in general practice. PES and senior clinicians considered that once the community placements were compulsory it would be easier to access placements by leveraging funding from DHBs.

  *Council needs to say this is a requirement and then in the accreditation visit it must happen but as a goal DHBs might not pay. (PES)*

- Interns were being sent to situations where the PES did not know the supervisor and the quality of the learning experience received.

  *Community placements are awesome. But there is stress in sending them to the community to someone I've never met. There is no engagement with supervisors. (PES)*

  *Community run - careful selection of placements for PGY1s especially where they won't be taken advantage of and where the focus should be on a learning role… not*

*how many patients you can fit into a day role to help the practice out. (Intern – survey response)*

*General practice and community settings need better support and more experience in delivering the training to make the attachments meaningful (CEO)*

- Some concerns that once community placements became compulsory, there could be negative reactions from some interns.

  *We will struggle when everyone has to go through it and experiences will become more varied. (RMO manager)*

- Potential loss of income for interns who were unable to choose to work overtime hours during a community placement and a perceived corresponding loss of resource for the DHB during the time interns were on community placements.

  *Less time commitment for the interns at hospital while on a community attachment. (Supervisor – survey response)*

- The need to maintain continuity for community providers who accepted interns.

# 5. Medium-term outcomes

## 5.1. Improved vertical integration

**Key findings**

- Most PES, CS and interns were positive about the inclusion of PGY2 into the prevocational training programme. Some commented that with changed rosters the extension of prevocational training to PGY2 was essential as interns could not gain the competencies they needed from one post-graduate year.
- PES and CS had more clarity about the learning outcomes for PGY2 (a 19% increase) and more PGY2 interns understood the learning outcomes they were required to obtain compared to the baseline survey.
- There was a 16% increase in the proportion of PGY2 interns who felt they could ask for help from the PES if needed, compared to the baseline survey.
- There was a 17% increase in the proportion of PGY2 interns who considered they were well supported by their PES.
- In response to the survey, just over two-thirds of PES, CS and PGY2 interns were confident PGY2 interns had the skills to enter the vocational training programme they wanted to enter. However, this had decreased compared to the baseline survey.

### 5.1.1. Transitions from trainee intern year

There was general agreement in the baseline and follow-up surveys that PGY1 was a learning year. Although three-quarters of PES strongly agreed or agreed the learning outcomes for PGY1 were clearly defined, fewer (59%) CS agreed this was the case (Table 11).

**Table 11. The extent PGY1 was considered a learning year with clearly defined outcomes (Baseline PES n=44) (follow-up PES n=72; CS n=426-468)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| The learning outcomes for PGY1 are clearly defined | 77% | - | 74% | 59% |
| PGY1 is a learning year | 93% | - | 93% | 90% |

Several of the interviewed PES and senior clinicians commented that PGY1 interns were less well prepared for their PGY1 year than in the past. They noted that interns had fewer clinical skills.

> *We are noticing students from Medical School are less prepared. "Not making them like they used to" but we have twice as many coming through. (RMO unit manager)*

Several also commented that Auckland graduates were familiarised with ePort in their trainee intern year but that this was not the case for Otago graduates. The advantages for interns of being familiar with ePort included being able to check off learning outcomes achieved in the trainee intern year.

> *If we can get better linking between TI and House surgeon year. If ePort can be used more uniformly in Auckland and Otago. If they are using their ePort to log skills and competencies right from the word go it might not be so onerous. (PES)*

### 5.1.2. Transitions to PGY2

The inclusion of PGY2 interns as part of the prevocational training programme was one of the changes introduced by Council. At the end of PGY2, interns must demonstrate through the information in their ePort that they have met the prevocational training requirements for PGY2 in order to have the endorsement on their practicing certificate removed.

Most interviewed PES and clinicians were positive about the inclusion of the PGY2 year. Most considered PGY2 was a learning year (Table 12).

> *In past PGY2 was a lost year. They could do a locum and wander aimlessly…Now it's better and focuses them better. (PES)*

> *I think it has been really important to include PGY2s. It keeps them thinking and focused on ongoing learning… It highlights and enables those struggling to be identified…PGY2 inclusion is tremendous and we could never go back. (PES)*

**Table 12. The extent PGY2 was considered a learning year with clearly defined outcomes (Baseline PES n=38-44) (follow-up PES n=72; CS n=476-493)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| The learning outcomes for PGY2 are clearly defined | 32% | - | 51% | 52% |
| PGY2 is a learning year | 73% | - | 85% | 77% |

While only half of PES considered the learning outcomes for PGY2 were clearly defined (Figure 13), this was a significant increase from the baseline survey.

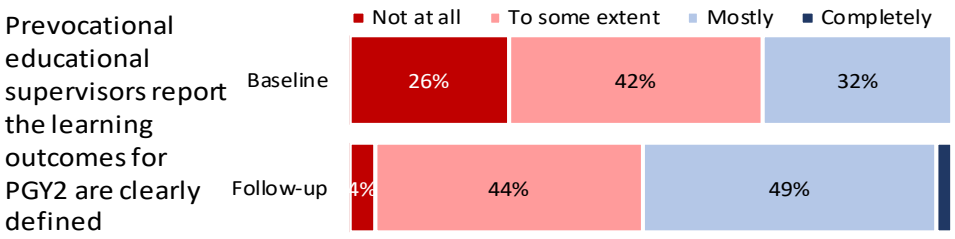


**Figure 13. The proportions of PES who considered PGY2 learning outcomes were clearly defined (Baseline n=38; Follow-up n=72)**

The advantages of including PGY2 in prevocational training were described as:

- An increased focus on PGY2 that augmented their learning and gave the year a focus.

  *It's harder to slide between the gaps because they have to have goals. (PES)*

  *The new systems helps to hold them in and ensure a better experience over two years…giving a better house officer at the end. (RMO unit manager)*

- Increased exposure to a range of different situations.

  *Interns now work fewer hours than their senior consultants - 45-48/50 max. There are benefits of the two-year programme, to give them the exposure to patients and opportunities to learn along the continuum of care… Previously a lot was learnt on the job. Now they don't have enough exposure…Two years gives them more time to gain the required skills. (PES)*

- Mentorship to help with career choices.

  *Mentorship provides an opportunity for career planning that is particularly important for those without doctors in the family. Many doctors don't have a health professional in family… At the end of Med School their families think they are doctors then they peel off to general practice and that may not be what they want. (PES)*

  *They are better equipped maybe to plan vocational training...Many know from the start of training... [PGY2] has helped a few who don't know… (PES).*

Approximately two-thirds of PGY2 interns considered PGY2 was a learning year, and that PGY2 would help them obtain the competencies they needed.

*I think it's a nice system having the two years of slightly more intensive supervision, just while you're finding your feet. I think it's a nice way of doing it. (Intern)*

*But I don't think in PGY2 you do want compulsory learning as you did in PGY1, but if you were potentially having to do something is probably a good thing and it does help you continue to develop as a professional towards a career path you want …(Intern)*

**Table 13. The extent PGY2 was considered a learning year with clearly defined outcomes (Baseline PGY1 n=183-186; PGY2 n=112) (Follow-up PGY1 n=150-154; PGY2 n=183-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Understand the learning outcomes they are required to obtain | 59% | 59% | 54% | **63%** |
| Agree the coming PGY2 is a learning year | 72% | - | 60% | 63% |
| Agree the coming PGY2 year will help obtain the competencies they need | 72% | - | 69% | 67% |

Approximately two-thirds of interns understood the learning outcomes they were required to obtain, a significant increase from the baseline survey (Figure 14).

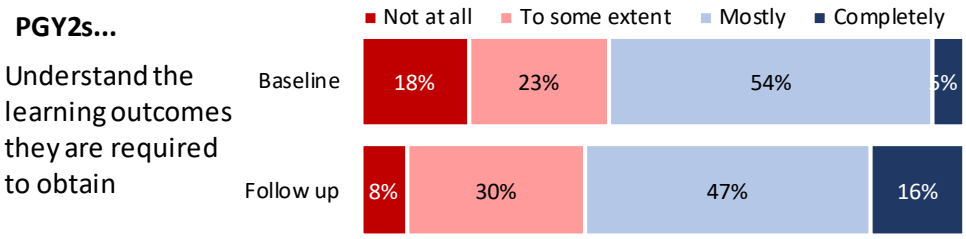


**Figure 14. The proportions of interns who considered PGY2 learning outcomes were clearly defined (Baseline n=112; Follow-up n=183)**

There was a 16% increase in the proportion of PGY2 interns who felt they could ask for help from the PES if needed.

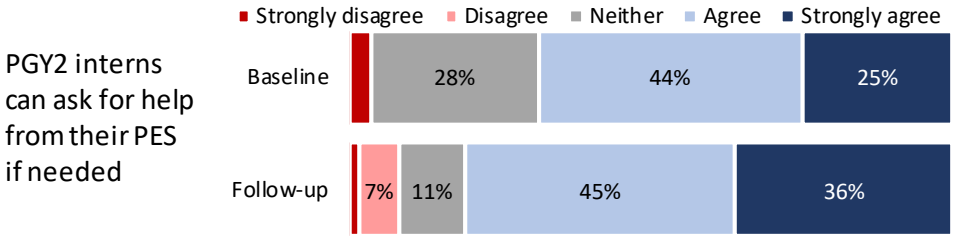


**Figure 15. The extent PGY2 interns felt they could ask for help from their PES (Baseline n=112; Follow-up n=183)**

There was a 17% increase in the proportion of PGY2 interns who considered they were well supported by their PES.

> *…It's certainly still a valuable service, to have that supervisor feedback three time a quarter, and I think that's really good actually, but it's sometimes difficult to motivate yourself to meet up. (Intern)*

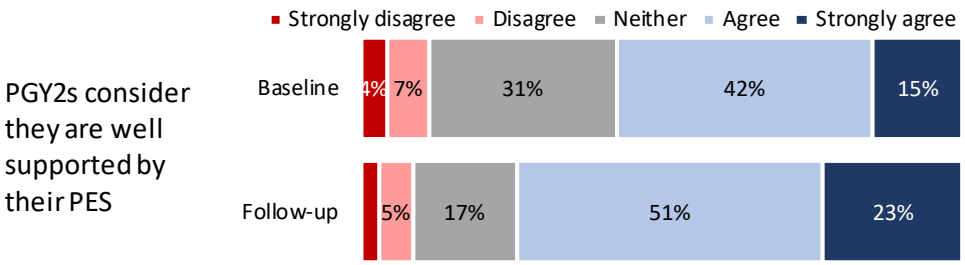


**Figure 16. The extent PGY2 interns felt well supported by their PES (Baseline n=113; Follow-up n=185)**

Although most were positive about the inclusion of PGY2 in the prevocational training programme there were a few challenges identified:

- Comments from PGY2 interns suggested specific teaching sessions were not yet in place in all DHBs for PGY2s.
- Highly achieving PGY1 might be delayed in entering vocational training programmes. However, some DHBs provided flexibility for PGY2 to participate in college prevocational training schemes during their PGY2 year.

  *Before MCNZ took ownership of PGY2 it was easier for some interns to step up into senior roles mid or later in the year such as to medical registrar roles. It was usually successful… now they can't do that and it may hold a few people back. (PES)*

  *…There is no support provided for those capable PGY2 doctors whom want to pursue further education (e.g. Paeds or O&G diploma, sitting GSSE). Leave is 'flexible' but nothing further is mentioned therefore it leaves a big grey gap for PES to interpret in various ways. (Intern – survey response)*

- In response to the survey, a number of interns commented that the PGY2 formal teaching sessions were not developed and were a repetition of PGY1 sessions or combined with PGY1.

  *PGY2 weekly teaching was with and intended for PGY1 therefore repetitive and not relevant and therefore most of us found alternative teaching instead. (Intern – survey response)*

- The need to include more progression of responsibilities into PGY2 year to ensure interns were adequately prepared to become registrars.

  *I think that as someone who is becoming a PGY2 there needs to be progression of jobs but you still do the same jobs as a PGY1 which is paperwork… by the time you are a PGY2 you need to start prepping to become a registrar but the system doesn't allow that because as a 'house officer ' your job by default becomes paper work and ward based jobs. Then suddenly you become a Reg and hold the phone and talk to consultants … (Intern – survey response)*

### 5.1.3. Entering a vocational training programme

In response to the survey, just over two-thirds of PES, CS and PGY2 interns were confident PGY2 interns had the skills to enter the vocational training programme they wanted to enter.

**Table 14. PGY2 skills to enter vocational training programmes (Baseline PES n=44; PGY2 n=110) (Follow-up PES n=72; CS n=496; PGY2 n=150)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| Interns have the skills required to enter the vocational training programme they want to enter | 68% | - | 71% | 65% |
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Are confident they have the skills to enter the vocational training programme they want to enter | - | 81% | - | 66% |

## 5.2. Improved balance between service demands and training requirements

**Key findings**

- There were no significant differences between the baseline and follow-up surveys in supervisors' and interns' views about the balance between service obligations and clinical education.
- Tension between service obligations and clinical education remained for nearly two-thirds of interns.
- Most considered there was adequate time for direct clinical contact but fewer than half PGY1 (40%) and PGY2 (40%) interns considered they had sufficient protected time for education.
- Many commented that the new rostering requirements, which form part of the Multi-Employer Collective Agreement for interns employed by DHBs, had generated challenges with the apprenticeship model of teaching, as CS often had less contact with interns, relief attachments could leave interns with less supervision, and there was reduced continuity of care for patients.

There were no significant differences between the baseline and follow-up surveys in supervisors and interns' views about the balance between service obligations and clinical education (Table 15). A smaller proportion of CS than PES considered interns have an adequate balance between service obligations and clinical education. In comments in response to the survey, the comment most frequently made by supervisors was the need for more protected teaching and supervision time.

*Management should respect the fact we are a training hospital and prioritise our roles in supervision and education. (Supervisor – survey response)*

*More buy in from the DHB about the value of intern supervision so that there is a balance between service provision and their training requirements. (Supervisor – survey response)*

*There needs to be adequate cover so all junior staff can attend teaching, we are struggling to deliver safe adequate service let alone attend teaching. (Supervisor – survey response)*

Most interns considered there was adequate time for direct clinical contact but fewer than half PGY1 (40%) and PGY2 (40%) interns considered they had sufficient protected time for education.

**Table 15. Supervisor and intern views about the balance between training and service delivery (Baseline PES n=41; CS n=230; PGY1 n=188-189; PGY2 n=118-119) (Follow-up PES n=61; CS n=478; PGY1 n=148-154 PGY2 n=184-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| Interns have an adequate balance between service obligations and clinical education | 51% | 37% | 64% | 43% |
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| There is enough protected time for education | 40% | 43% | 40% | 40% |
| There is adequate time for direct clinical contact | 96% | 93% | 91% | 91% |
| There is an adequate balance between service obligations and clinical education | 49% | 55% | 53% | 52% |

New rosters had generated some challenges with the apprenticeship model of teaching as CS may have less contact with interns, relief attachments could leave interns with less supervision and there was less continuity of care with patients.

*There is incredible fragmentation of patient care provision. Part of the learning experience is following through on patients you have admitted, which is very rare now. With the new RMO rota this has drawn the PGY1 and 2s away from their parent teams even more than before, fragmenting education and continuity. Management of the non-medical aspects of being a doctor need to be enhanced … RMOs learn from SMOs, but time to discuss and reflect would be good. (Supervisor – survey response)*

# 6. Long-term outcomes

## 6.1. Improved quality of learning for interns

**Key findings**

- PES and CS generally considered teaching was an important part of their role and one they enjoyed.
- Council provided training to support the changes to prevocational education. In response to the follow-up survey, all PES and CS responding to the survey said they had attended some form of training in the previous three years. This was a significant increase on the baseline survey.
- There was an ongoing demand for more training, especially after hours training and/or online training.
- Three-quarters of PGY1 (76%) and just over two-thirds of PGY2 (69%) had high levels of overall satisfaction with the quality of their prevocational training. Interns described the most effective aspects of prevocational training in developing them to practice as a doctor as hands-on clinical experience and good quality supervision.
- Fewer PGY1 (55%) than PGY2 (66%) were satisfied with the quality of their last attachment. There were no significant changes from the baseline survey.
- Interns highlighted the importance of hands on clinical experience and good quality supervision in their training. Too much paperwork and administrative tasks were described as limiting to hands-on clinical practice.
- The proportion of CS recording meetings at the start and end of clinical attachments was high. However, the mid-point meetings were poorly recorded in ePort with some recorded at the same date as the start of attachment meetings.
- As a result of rostering challenges and relief attachments some interns said they saw more of the registrar than the CS. They thought registrars and other junior staff may have an increasingly important role in providing feedback about interns.

### 6.1.1. Trained supervisors

PES and CS generally considered teaching was an important part of their role and one they enjoyed. Overall levels of satisfaction with their clinical role were high for PES. Overall satisfaction was slightly lower for CS, but almost all would choose to continue in an educational role if they had a choice.

**Table 16. PES and clinical supervisor satisfaction with their teaching roles (Baseline PES n=50; CS n=239) (Follow-up PES n=71-72; CS n=468-498)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Supervisors** | **PES** | **CS** | **PES** | **CS** |
| Overall satisfaction with their education role | 84% | 67% | 90% | 73% |
| Would choose not to have an education role if given the choice | - | 7% | - | 6% |
| Consider teaching is an important part of their role | 100% | 95% | 96% | 97% |
| Enjoy their education roles | 94% | 86% | 94% | 90% |

As part of the implementation of the new prevocational medical training requirements, Council coordinated 29 workshops and trained over 900 CS. All PES and CS responding to the survey said they had attended some form of training in the previous three years. In comparison, in response to the baseline survey 82% PES and 41% of CS said they had attended some form of training in the previous three years. Approximately half of PES (51%) and 21% of CS said they had attended training about ePort (Figure 17).

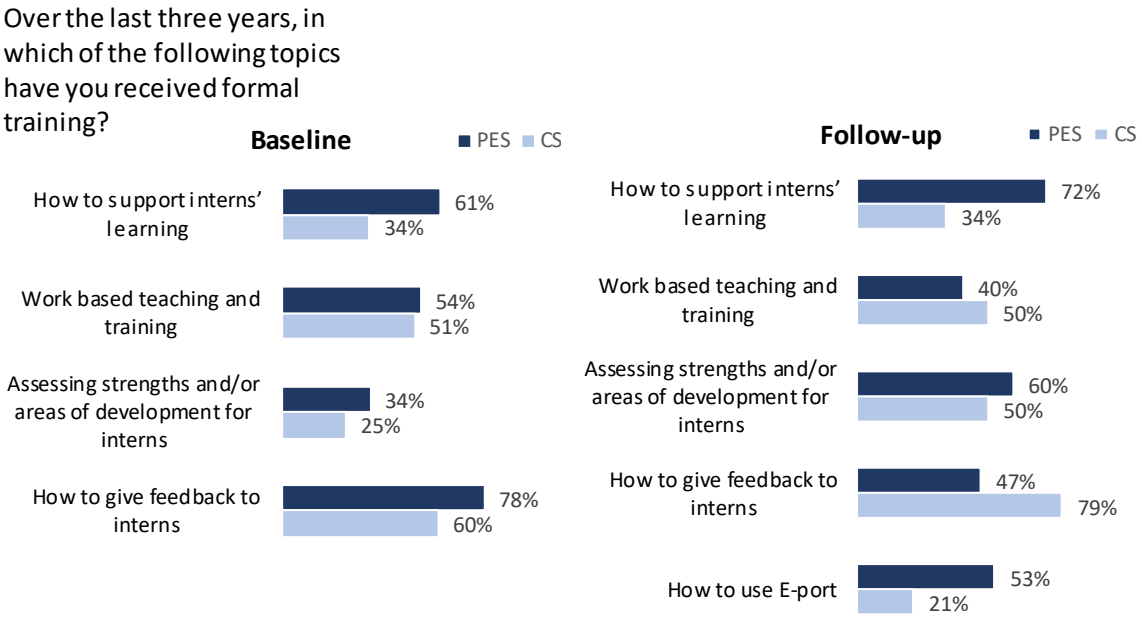


**Figure 17. Training in educational activities over previous three years (Baseline PES n=41; CS n=112) (Follow-up PES n=72; CS n=501)**

Substantial proportions of PES (50%) and CS (40%) would like to receive further training/professional development (Table 17). However, for some, workloads and the timing of training were barriers to attending. In comments in response to the survey, some suggested evening and online training options.

*It is very important that you understand that I like the majority of my colleagues are overwhelmed by clinical work. (Supervisor – survey response)*

*There has been a huge increase in RMO numbers. SMOs are being asked to supervise more and more RMOs. It makes it harder for them to deliver quality supervision… MCNZ may introduce changes, but it's not just about the interns now. We have to look after SMOs to make sure they are well supported and resourced. (PES)*

**Table 17. Supervisors' views on wanting more professional development (Baseline PES n=50; CS n=239) (Follow-up PES n=72; CS n=501)**

| | Baseline | | Follow-up | |
|---|---|---|---|---|
| | PES | CS | PES | CS |
| Would like to receive further training/professional development focused on supervision/ assessment/ teaching? | 62% | 51% | 50% | 40% |

In the survey, supervisors were asked what topics they wanted additional training on:

- Supporting underperforming or struggling interns (55)

  *How to help someone not measuring up in a constructive way.*

- Assessing interns (47)

  *Assessing strengths, giving feedback and areas for development.*

- Supervision (38)

  *Dealing with failing/difficult junior doctor. What is the level they should be working at?*

  *Expectations of PGY feedback. Specifically, for PGY1 doing general practice. This is a new thing so not much to compare to.*

  *How to teach effectively under new MECA constraints ... different HO every other day.*

- General expectations and a range of topics (31)

  *Understanding our actual role without being flooded with information.*

- ePort (30)

  *Using ePort more efficiently.*

- Teaching (29)

  *Less emphasis on managing the problem intern and more on positive teaching strategies.*

  *The only training I have had is what is available on ePort in regard to interns - I think there should be much better training about how to support them.*

- Giving feedback (26)

*How to not keep saying the same thing for the competent individual.*

*Feedback to poorly performing interns.*

- Stress management/mental health (7)

  *Dealing with the doctor in difficulties dealing with mental health issues in an RMO where it may be impacting on performance.*

### 6.1.2. Overall quality of teaching/learning/supervision

Three-quarters of PGY1 (76%) and just over two-thirds of PGY2 (69%) had high levels of overall satisfaction with the quality of their prevocational training (Table 18). Most interns felt they were treated with respect, as a valued as a member of a multi-disciplinary team and had supervisors who were interested in making them better doctors. Fewer (58%) interns considered programmes were organised to meet their educational needs.

**Table 18. Interns' satisfaction with the quality of their training (Baseline PGY1 n=186-189; PGY2 n=113-119)(Follow-up PGY1 n=153-154; PGY2 n=184-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Overall satisfaction with the quality of their prevocational training | 76% | 66% | 76% | 69% |
| Interns rate the extent to which programmes were organised to meet their educational needs | 63% | 45% | 58% | 58% |
| My supervisor was interested in making me a better doctor | 75% | 74% | 81% | 79% |
| Are valued as a member of a multi-disciplinary team | 88% | 87% | 83% | 84% |
| Are treated with respect | 88% | 88% | 90% | 89% |

In response to the follow-up survey, interns described hands-on clinical experience and good quality supervision as the most effective aspects of prevocational training in developing them to practice as a doctor.

**Table 19. Interns' comments about the most effective aspects of prevocational training in response to the survey**

| Aspects of training | Mentioned by | Examples of comments |
|---|---|---|
| Clinical experience/ hands on time | 115 | *Patient exposure, independence to make decisions and work through clinical problems but while feeling supported.* |
| Supervisors | 63 | *Interested supervisors, the right mix of independence and support and a work load that is manageable.*<br>*The flexibility by consultants to give me time and supervision to practice and gain experience in practical procedures. I also appreciated feedback from consultants at end of run meetings about how I was going during the run.* |
| Informal teaching during work | 37 | *Discussions and reflections with supervisors about the nature of medicine and its challenges, conversations which arose in response to difficulties I was having on the wards. The most valuable lessons I have learnt through experience in managing patients on call.* |
| Working relationships | 27 | *Being in a small hospital and being a valued member of the team from day 1- allowed a lot of practical and procedural experience and less hierarchy to navigate.* |
| Learning from peers | 22 | *Learning from my peers (fellow PGY1s and 2s)* |
| Independence /making decisions | 24 | *Being able to practice independently whilst having adequate supervision and guidance (rather than simply carrying out the tasks that seniors require).* |
| Exposure to variety | 14 | *The diverse exposure to different hospitals and environments.* |
| After hours/ on call work | 5 | *Dealing with problems on long days, nights and weekends.* |
| Teaching others | 3 | *Being able to teach medical students - I found this helped me to really consolidate my own knowledge and what I did and didn't know and forced me to think much harder about the things I did in every day practice and why I did them/whether they were clinically justified or backed up by evidence.* |

Interns were also asked to comment about the least effective aspects of their clinical training (Table 20). More interns commented about ePort and poor teaching quality than other aspects of their training.

**Table 20.Interns' comments about the least effective aspects of prevocational training in response to the survey**

| Aspects of training | Mentioned by n | Examples of comments |
|---|---|---|
| ePort/ NZCF | 66 (20%) | *…No one is able keep up to date with it as they achieve those hundreds of learning outcomes so just end up making up dates and ticking them off in bulk without gaining anything from the process.* |
| Teaching quality | 62 (18%) | *Protected teaching- often unable to make this due to ward or theatre commitments.*<br>*The teaching programme was combined with PGY1 so I had attended most of the same sessions last year which made me lose motivation to attend.* |
| Workloads | 30 (9%) | *… extremely busy. - excessive patient numbers - little time for clinical learning from seniors.* |
| Admin/paperwork | 23 (7%) | *Surgery run. Way to busy only time for paper work. I sit and do paperwork like a monkey for eight hours a day…* |
| Attachment | 24 (7%) | *Having two medical relief runs in a row - in one training year. I feel that I miss out on a lot of teaching being on a relief run and have not been able to further my training and education.*<br>*Reliever run. Home teams did not take reliever seriously. Some of them think relievers are just a waste of space. There was no continuity of care.* |
| Supervision | 18 (5%) | *Prevocational supervisor this year could have been more interested in progress/goals*<br>*My supervisors have been good in general but the ePort meetings themselves have been mostly tick box exercises with little genuine interest or constructive feedback* |
| Not enough hands on work | 10 (3%) | *Essentially, I spend a lot of my time doing jobs that could be much more efficient with better processes around them, or better health IT. The opportunity costs to this is spending more time learning, being with patients to explain things, go to ED and admit, spend time in theatre or seeing procedures etc.* |

### 6.1.3. Quality of supervision on the last attachment

There were no significant changes from the baseline survey in various measures relating to the quality of the last attachment. Informal feedback from CS was valued but only a quarter to a third of interns felt they received informal feedback.

> *I think the most helpful thing was the meetings with the supervisor, and then they'd say like, "How are you finding the run?" and then giving you feedback on how you're doing. That was definitely… I think just making a time where you can sit down with them is really helpful. (Intern)*

Most interns felt able to ask their supervisor for help. However, only two-thirds agreed or strongly agreed that their CS involvement was adequate. In open-ended comments in response to the survey, some interns emphasised the registrars' role in clinical teaching and suggested registrars may need formal training in supervision and how to provide feedback. Changes to rosters and the relief attachments may have increased the role of registrars in prevocational training.

> *Maybe having sessions with regs and consultants (and HOs) about how to be an effective teacher and using clinical opportunities for teaching. HOs could learn from this and pass down to medical students and theoretically create a new generation that's better at teaching... (Intern – survey response)*

> *Also, the consultants get feedback from registrars about our performance. I also think we should be given the opportunity to give feedback about our registrar's performance - in terms of their leadership skills and how they managed us juniors on the team. Sometimes registrars also need a lot of support and growth - but consultants won't know where they're not good at, if feedback from junior staff is not sought. (Intern – survey response)*

**Table 21. Interns' views on the quality of teaching in their last attachment (Baseline PGY1 n=186-189; PGY2 n=116-119) (Follow-up PGY1 n=153-154; PGY2 n=184-186)**

| Key outcomes | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Quality of teaching on the last attachment was good or very good | 52% | 55% | 55% | 66% |
| Provided with informal day-to-day teaching that helped them learn | 52% | 71% | 65% | 65% |
| CS involvement was adequate | 60% | 53% | 61% | 63% |
| Interns can ask for help from the CS on the last clinical attachment | 83% | 83% | 81% | 84% |
| CS on the last attachment provided feedback that helped the intern to identify their strengths and weaknesses | 65% | 55% | 71% | 67% |
| CS on the last attachment provided informal feedback about how the intern was doing | 19% | 26% | 25% | 34% |

### 6.1.4. Feedback mechanisms were in place for those who need additional assistance

Most interns felt they understood their areas of strength and areas where they needed further development (Table 22). Most felt they could ask for help from the PES. The proportion of PGY2 interns who felt they could ask for help had significantly increased compared to the baseline survey.

**Table 22. The extent interns considered they understood their strengths, areas for development and could ask for feedback (Baseline PGY1 n=186-189; PGY2 n=116-119) (Follow-up PGY1 n=153-154; PGY2 n=184-186)**

| | Baseline | | Follow-up | |
|---|---|---|---|---|
| **Key outcomes - interns** | **PGY1** | **PGY2** | **PGY1** | **PGY2** |
| Interns understand their areas of strength | 75% | 82% | 71% | 82% |
| Interns understand areas of clinical practice where they need further development | 77% | 81% | 80% | 80% |
| Interns can ask for help from the PES if needed | 89% | 69% | 86% | **81%** |

One of the main ways interns received feedback was through meetings with PES and CS. The CS is responsible for meeting with the intern at the beginning, mid-way and at the end of the clinical attachment to provide formal feedback on progress and performance and review the intern's ePort.

The proportion of CS recording meetings at the start and end of attachments was high. However, the mid-point meetings were poorly recorded in ePort with some recorded at the same date as the start of attachment meetings.

> *More opportunity for leave and better systems in place to provide feedback on performance. None of the consultants genuinely sit down and have a proper mid-run meeting to provide feedback. Maybe this should be a compulsory meeting with the registrar instead to get some proper feedback from someone who actually sees you on a day to day basis. (Intern – survey response)*

In interviews, PES reported greater frequency of meetings between CS and interns as this was a required field in ePort. They also used ePort to monitor meeting frequency and respond to CS about completion of ePort and the quality of the feedback they provided in ePort.

**Table 23. ePort data about the proportion of CS recording meetings with interns**

| | Placements with start meeting (%) | Placements with end meeting (%) | Placements with start and end meeting (%) |
|---|---|---|---|
| 2015 (n=454) | 93.9% | 99.8% | 93.8% |
| 2016 (n=896) | 95.4% | 98.1% | 94.8% |
| 2017 (n=1112) | 90.1% | 91.8% | 88.4% |
| 2018 (n=1168) | 91.2% | 91.1% | 86.8% |
| Total (n=1940)[7] | 92.3% | 94.5% | 90.5% |

In interviews, PES described one of the advantages of the changes to prevocational training and the use of ePort as enabling earlier identification of interns in difficulty.

> *The changes are great... They have formalised the system and provided a more structured environment. In past interns learnt on the run more which was not so good for those struggling. (PES)*

Some CS still found it difficult to identify interns having difficulty. There were comments suggesting that this might be an effect of less contact with interns as a result of new rosters and pressure to supervise more interns.

### 6.1.5. Challenges in providing high quality teaching

Challenges to providing high quality teaching for interns were identified by PES and CS. Some responses indicated the rostering requirements under the MECA contract were making teaching more difficult because:

- Interns may be rostered off on designated teaching days, although some DHBs had ensured that would be managed.

  *The good thing is the rostered days off are not on either of our mandatory protected teaching time days, which is Tuesdays and Thursdays. That is definitely good, they've done a good job of making sure that is not affected, because that would be quite a bummer I think. We don't get a lot of protected teaching time, taking away any I think would be quite bad. (Intern)*

- Interns may work different and fewer hours than CS leading to less direct contact.

  *CMOs don't see enough of their RMOs and find themselves supervising RMOs they don't really know. (CE)*

[7] Total n value does not add up to the sum of the years as most interns appear in multiple years.

- Relief attachments made it more difficult for CS to understand the strengths and weaknesses of interns on these attachments.

  *Relief posts on runs where interns work in teams for short times. It is very difficult to supervise these interns... the supervisors but may not see them that much. (PES)*

  *Relief was difficult because you sort of have a supervisor laid out for you and they're all great people, but you don't actually work with them, and then getting feedback, they sort of ask you to put forward some names of bosses who have worked with you, and the nature of relief is that you just don't spend that much time with the bosses. (Intern)*

- Interns may not be able to provide continuity of care to their patients.

  *A limitation from 12-day to 10-day working rosters does not suit hospital-based patient care and leads to excessive handovers, a lack of continuity of care and most importantly unsafe working environments. I have witnessed this numerous times while working as part of various teams in a number of different departments … Furthermore, working less will serve to dilute the learning experiences available to the RMO, especially in settings where repetition is the key to mastery, such as procedural oriented practice… (PGY2 intern)*

- There may be difficulty getting interns together.

  *It's difficult to get the interns all together and develop communities of practice (PES)*

There was some discussion by interns and CS about the need for self-directed learning. Interviewed interns talked about proactively taking opportunities to expand their skills and to fill gaps where they felt they needed more training or education. They also talked about workloads as providing a disincentive to proactively seeking out education opportunities as they would inevitably lead to more overtime work.

> *Interns need to be more partners and commit to coming along [to teaching sessions]. When I was training you took every opportunity ... they now work within their contract...they aren't prepared to come in just for learning. ... It also reflects their busyness. (PES)*

## 6.2. Ensured public health and safety

**Key findings**

- The general view was that early identification of interns who were having difficulty and the response taken to address this, were the main way that changes to prevocational training would ensure public health and safety.
- Other changes such as improved quality of teaching and opportunities for placements in community settings also contributed to doctors with a broader set of skills.
- A substantial proportion of interns considered they had to cope with problems beyond their competency (61% of PGY1 and 54% of PGY2). While the results were not conclusive, this seemed more likely to happen in smaller DHBs. However, in response to the survey, several interns commented that being in situations that stretched their skills also provided valuable learning opportunities.

A general comment from those interviewed was that most interns were high achievers and would be successful in completing their training programmes regardless of the changes to prevocational training.

> *Ten percent require lots of work … with a formalised system and PGY2 we can pick up the underperformers at an earlier stage. In the past they could go under the radar. It was hard to actually fail them. The structure now improves accountability. (Senior clinician)*

Changes to prevocational training to increase transparency and improve the quality of education contributed to interns graduating with a broad set of skills.

> *Are we producing better RMOs? I'd like to say yes but can't evidence it. (Senior clinician)*

> *It probably has improved … Most interns finish PGY1 and PGY2 with the technical competencies they need … Good interns have always thrived … Goals are useful for weaker ones and areas for improvement identified by supervisors on runs and setting goals they can work to. (PES)*

Interviewed clinicians considered the main way the changes to prevocational training would improve public health and safety was by early identification and response to interns having difficulty. Previously interns who were struggling might not have been identified until they were in registrar posts.

> *Most are going to be pretty good anyway. We have marginally improved them through this programme. It's the people who are struggling, the 5-10% of interns, I think has helped more substantially because it highlights them more efficiently and creates the structure to work through them better. (PES)*

> *There is a tighter supervision structure and accountability now … People are more likely to alert me to people not doing well. They are the greatest threat to patient safety. (Senior clinician)*

Feedback from interns in response to the evaluation also identified a substantial number considered they were in situations where they had to cope with problems beyond their competence or experience (Figure 18).

*I was quite unsupported and quite unsafe actually, … It's just the nights … I don't think we're trained enough to be there, because you run the ED by yourself overnight and you get traumas and things, and they tell you, you can call people in and I'm sure they would come in if you do, but I just don't think we should be put in that situation in the first place … (Intern)*

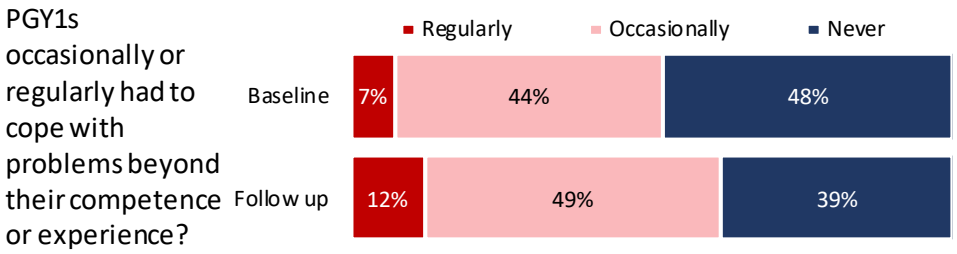


**Figure 18. Interns reported experiences coping with problems beyond their competency (Baseline n=187; Follow-up n=153)**

While the results were not conclusive, the proportion of interns coping with problems they considered to be beyond their competence or experience seemed higher in smaller DHBs.

**Table 24. PGY1 and PGY2 interns who occasionally or regularly have to cope with problems beyond competence/experience**

| DHB size | Baseline | Follow-up | Both time periods |
|---|---|---|---|
| Small (<100,000) | 50% | 67% | 59% |
| Not small (≥100,000) | 52% | 56% | 55% |
| Total | 52% | 57% | 55% |

Cultural safety of health practitioners is an important element of ensuring public health and safety. Health systems that work equally well for Māori and a focus on cultural safety contribute to improved healthcare and improved outcomes for Māori. Although not explicitly explored in the evaluation, some interns and PES commented about cultural competence in interviews and in response to the survey.

*… Cultural competence is not something you can gain. And it is different to trying to empower and enhance the knowledge of your newly graduated Māori doctors. There is a lack of emphasis on trying to facilitate Māori becoming doctors. I had to fight for leave approval and funding for the only two events we have to continue our indigenous cultural supervision and education (Hui-ā-tau and PRIDoC)… (Intern – survey response)*

# 7. Health and wellbeing

**Key findings**

- Supervisors and interns self-assessed their wellbeing based on the four domains of Te Whare Tapa Whā.
- Total wellbeing scores for PES and CS responding to the survey were mostly positive.
- Over all domains, there were fewer interns' scores in the most positive category. This self-assessment was not a diagnostic tool, but results suggested that more than one in 10 interns may require more support than they currently received to improve their wellbeing.
- Early identification of interns in difficulty through ePort and earlier responses may have contributed to improved intern wellbeing.

Questions about PES, CS and intern health and wellbeing were included in the follow-up survey in response to feedback Council had received about the health and wellbeing of interns.

The questions included were self-assessments based on the four domains of Te Whare Tapa Whā[8]:

- Taha tinana or physical health
- Taha wairua or spiritual health
- Taha whānau or wider family and community health
- Taha hinengaro or mental health.

Wellbeing within each domain was assessed on a 1 to 5 scale with 5 being the most positive score.

## 7.1. PES and CS wellbeing

Total wellbeing scores for PES and CS responding to the survey were mostly positive (Figure 19) with only a small number of CS with scores in the lowest category. When individual domains were considered, taha whānau had the highest proportion of positive scores and taha wairua the lowest.

[8] Use of assessment scales in the four domains drew on development of Hua Oranga, a more detailed tool assessing different aspects of wellbeing. Hua Oranga was developed by Mason Durie and Te Kani Kingi.

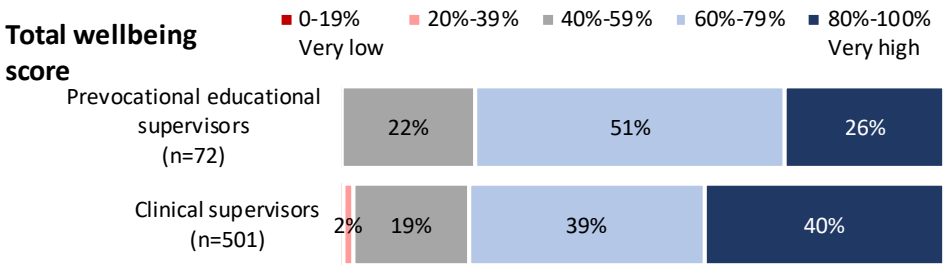


**Figure 19. Wellbeing scores for PES and CS (PES n= 72; CS n= 501)**

## 7.2. Intern wellbeing

Intern wellbeing was self-assessed using the same scales. Over all domains, there were fewer scores in the most positive category. Whānau health was the wellbeing domain with the highest proportion of maximum scores.

When total wellbeing scores were considered across all domains, 13% of PGY1 and 15% of PGY2 interns had overall wellbeing scores in the lowest two categories (Figure 20).

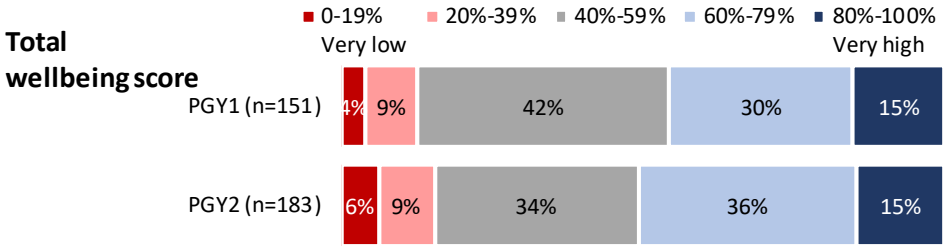


**Figure 20. Wellbeing scores for interns (PGY1 n= 151; PGY2 n= 183)**

This self-assessment was not a diagnostic tool, but results suggested that more than one in 10 interns may require more support than they currently received to improve their wellbeing.

> *I don't think my clinical supervisor, the one you would meet with every three months… I never had any of them ask about anything related to wellbeing, but my educational supervisor I remember was really lovely, and each time I met with her she would inquire about that. (Intern)*

> *I know some of my colleagues who kind of needed urgent mental health leave and our resident doctor support team has been really good with them, advising them at really short notice. (Intern)*

Current support includes having the same PES through both the PGY1 and PGY2 years as well as workplace EAP. Several people interviewed noted that conversations about wellbeing were now happening much more than in the past.

*PGY1 supervisor continues (PES) with them if possible as a mentor… They know someone in the organisation is interested in their welfare. (Senior clinician)*

*Distress can be caused by not knowing about what to do re career pathways…Having conversations along the way about what they like and want to do helps… (Senior clinician)*

Some interviewed PES noted that early identification of interns in difficulty through ePort and earlier responses may have contributed to improved intern wellbeing.

*Those who will get stressed will do so anyway… I hope it improves because those struggling know how to get help and it is easier to identify them… (PES)*

*People are now more prepared to talk about burnout, anxiety and self-management. Senior staff are more aware of it. …Doctors in difficulty is mostly health related, not competencies. It can be because of team work and personality. More focus in ePort is required. (PES)*