Advanced Choice Employment (ACE) factors influencing PGY-1 workplace selection and future career intentions of a cohort of doctors in Waikato

Helen Clark, Wayne de Beer, Veronique Gibbons

ABSTRACT

AIM: To assess whether or not a sample of PGY-1 doctors in the Waikato region remained satisfied with the ACE system for employment 12 years after its inception.

METHOD: An anonymous paper-based survey was completed by a cohort (n=60) of 2015 and 2016 PGY-1 doctors based at the Waikato DHB. Questions were based around reasons for selecting the DHB, satisfaction with the ACE process and future career intentions.

RESULTS: Overall satisfaction with the ACE selection process was reasonable (63%). Over 60% of the 2015 and 2016 cohorts chose Waikato as their first choice DHB, and of those, over 90% intended to carry on through to at least PGY-2 level at the DHB. An overwhelming majority (93–96%) intended to continue practising in New Zealand.

CONCLUSIONS: Consistent trends were observed across the two cohorts in regards to their reasons for selecting the DHB, satisfaction with ACE and future intentions, with some differences observed with familial background and interest in pursuing hospital-based specialties. Our findings suggest that ACE remains a satisfactory recruiting system for postgraduate junior doctors, however, motives around initial DHB selection and future vocational intentions remain unclear and warrant further investigation.

Advanced Choice Employment (ACE) is a national application recruitment process that was commenced in 2003. ACE coordinates the employment of the 1st year house officer (or Post-graduate Year 1 (PGY-1) doctor) following graduation from one of the two medical schools in New Zealand (and also Australian Medical school graduates who apply to work in New Zealand). It requires a single application nationally and a candidate also receives a single offer of employment to work as an intern at one of the 19 New Zealand district health boards (DHBs) that offers PGY-1 doctors employment.

ACE is a centralised matching process where both the applicants and DHBs rank the order of preference of the hospital and the employee. Annually, the cut-off date for ACE registration is towards the end of May and applications for placement close in mid-June. Employer selection for the best candidates and ranking happens a month later (in July) and a matching process occurs. The national employer offer date takes place within the first week of August annually.

Satisfaction with the ACE system has anecdotally been high. In a national audit in 2006, 96–99% of successful applicants were matched to one of their preferred four DHBs. Eighty-one percent were matched with their first choice of employment.[1] This aligned with the results of a former study in 2003 and 2004 that had demonstrated that 96% of applicants were employed in one of their top four choices for both the years.[2]

These studies also demonstrated high satisfaction rates among the PGY-1 group with ACE selection.[1–2]

This study aimed to assess whether or not 12 years after its commencement, a sample of PGY-1 doctors remained satisfied with the ACE system for employment. In addition, this study asked the sample of doctors their reasons for their selection of a particular DHB for employment to better understand influences for DHB selection. Finally, this study wished to address whether or not the PGY-1 group of doctors had future intentions of overseas travel and work.

Method

A paper-based survey was composed and distributed by the Clinical Education & Training Unit (CETU) at the Waikato DHB. The survey contained three groups of questions designed to measure; (1) The respondent's reasons for choosing the DHB, (2) overall satisfaction with the ACE selection/allocation process and (3) the respondent's future intentions at that point in time.

All questions were closed-ended, with Category 1 and 3 items utilising a dichotomous "Yes /No" format; while Category 2 items were rated on a Likert Scale (items scored 1–5, with 1 = 'extremely dissatisfied' and 5 = 'extremely satisfied').

A cohort of 30 PGY-1s were asked to complete the survey at the beginning of the 2015 PGY-1 orientation period. This process was replicated in 2016 with the new PGY-1 cohort (n=30). Response rate was excellent, with 100% return for 2015 and 90% for 2016.

The survey was completed anonymously. No demographic or other identifying information was collected. Data from the completed surveys were analysed using descriptive statistics in Excel and SPSS.

Results

Reasons for selecting DHB

The results show some similarities and differences between the two cohorts. Sixty percent of the 2015 cohort and 63% of the 2016 cohort indicated that Waikato DHB was their first choice of hospital. Students' trainee intern (TI) experiences rated highly for both cohorts, with 36.7% of 2015 PGY-1s and 44.4% of 2016 PGY-1s citing this as an influencing decision. However, the 2016 cohort appeared to be more influenced by familial history, with 48.1% raised in the region and 25.9% motivated by having a partner based there, compared with 26.7% and 16.7% in 2015, respectively.

Figure 1: Reasons cited by the 2015 PGY-1 cohort for choosing Waikato DHB.

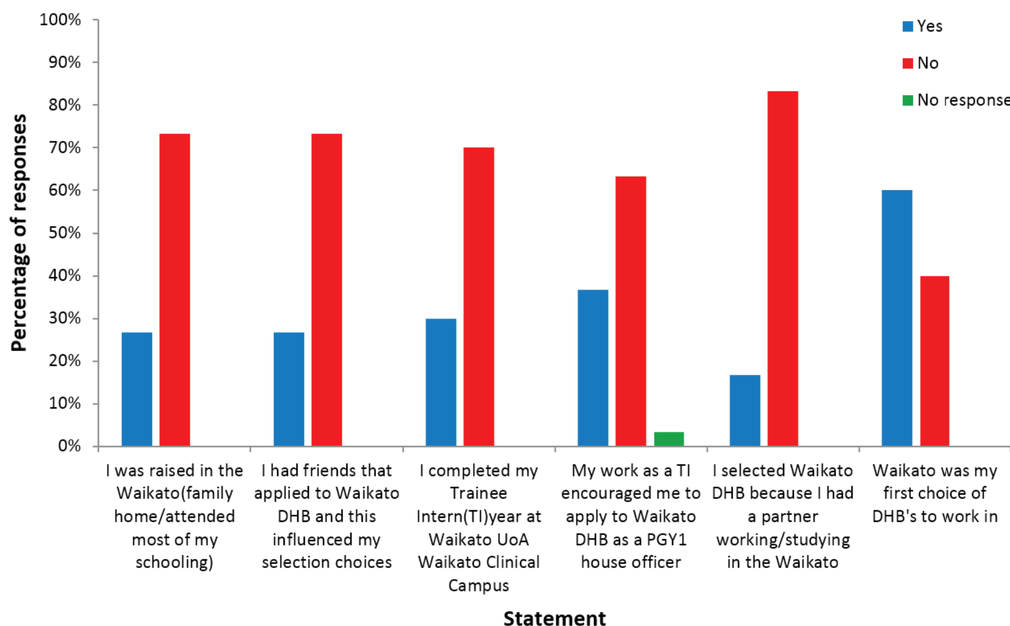

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Figure 2: Reasons cited by the 2016 PGY-1 cohort for choosing Waikato DHB.

Satisfaction with ACE

Reaction to the allocation of the graduate to the DHB was generally favourable, and that perception increased from 2015 to 2016. In 2015, 83.3% of respondents were either somewhat satisfied or extremely satisfied with their ACE allocation to the DHB. This had increased to almost 90% (88.9%) in 2016.

Respondents were also encouraged with the training and education they expected to receive with over 90% percent (2015—90.0%, 2016—92.6%) either somewhat or extremely satisfied this would happen. Although not as high, this perception was also reflected in the respondents' satisfaction rating of skills and procedures they expected to practice at the DHB (2015—73.3%, 2016—70.4%).

Figure 3: Response to questions regarding satisfaction with ACE selection and allocation for the 2015 PGY-1 Waikato DHB cohort.

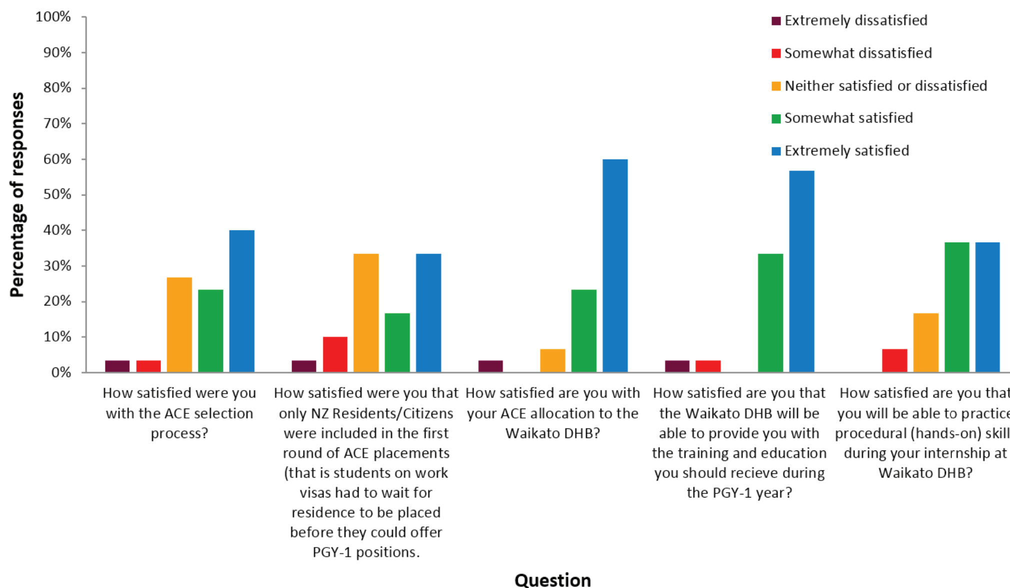
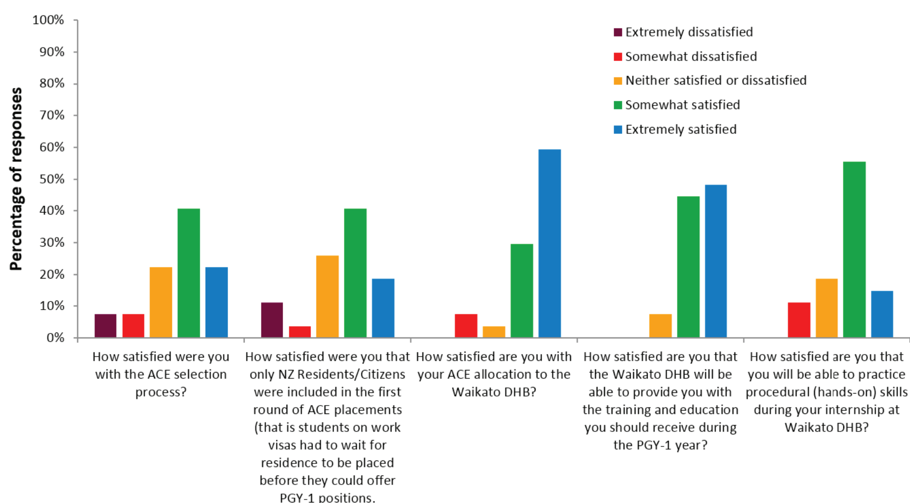


Figure 4: Response to questions regarding satisfaction with ACE selection and allocation for the 2016 PGY-1 Waikato DHB cohort.



Comparison between questions

For the questions *How satisfied are you with the ACE selection process?* and *How satisfied are you with your ACE allocation to the Waikato DHB?*, significant correlations were found for both the 2015 cohort (*rs* =.597, *p*=.001) and the 2016 cohort (*rs* =.442, *p*=.021). This indicates that positive views of PGY-1 allocation to the DHB are, in general, reflected in an overall satisfaction of the ACE selection process.

We also found significant correlations between the questions *How satisfied are you with your ACE allocation to the Waikato DHB?* and *How satisfied are you that the Waikato DHB will be able to provide you with the training and education you should receive during the PGY-1 year?*, for both the 2015 cohort (*rs* =.502, *p*=.007) and the 2016 cohort (*rs* =.479, *p*=.011), showing that overall satisfaction of the ACE allocation may in part be related to the strength of the training and education programme of the DHB.

Future intentions

Over 90% percent of respondents in each cohort (93.3 and 96.3% respectively) intended to stay and work in New Zealand for the rest of their careers, with the majority of those respondents intending to remain at Waikato DHB for the PGY-2 year at least. While 70% of the 2015 cohort intended to become a hospital-based specialist, this percentage had dropped by almost 20% percent in 2016 (51.9%). Almost all of the respondents intended to remain in the field of medicine (96.7% and 100% respectively).

Figure 5: Future intentions of the 2015 PGY-1 cohort.

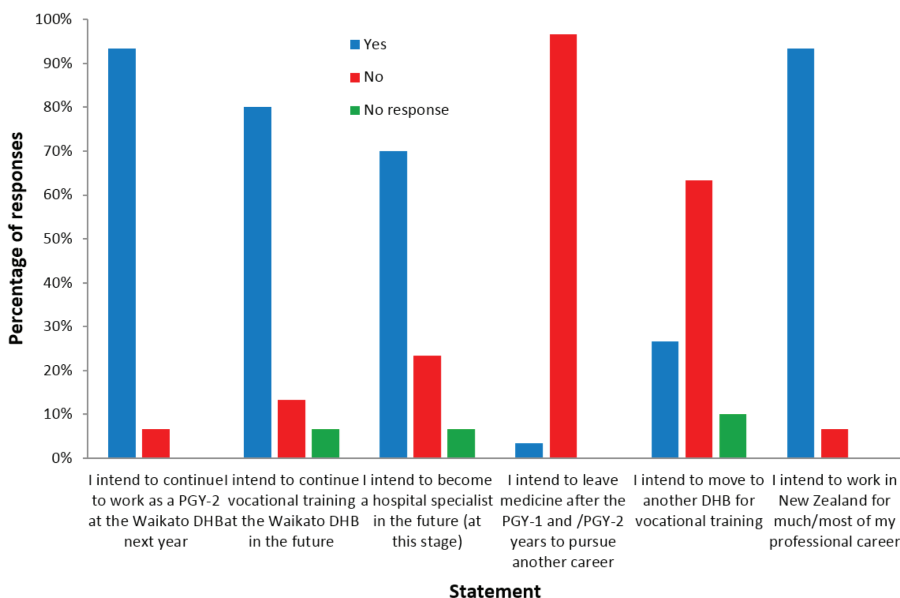


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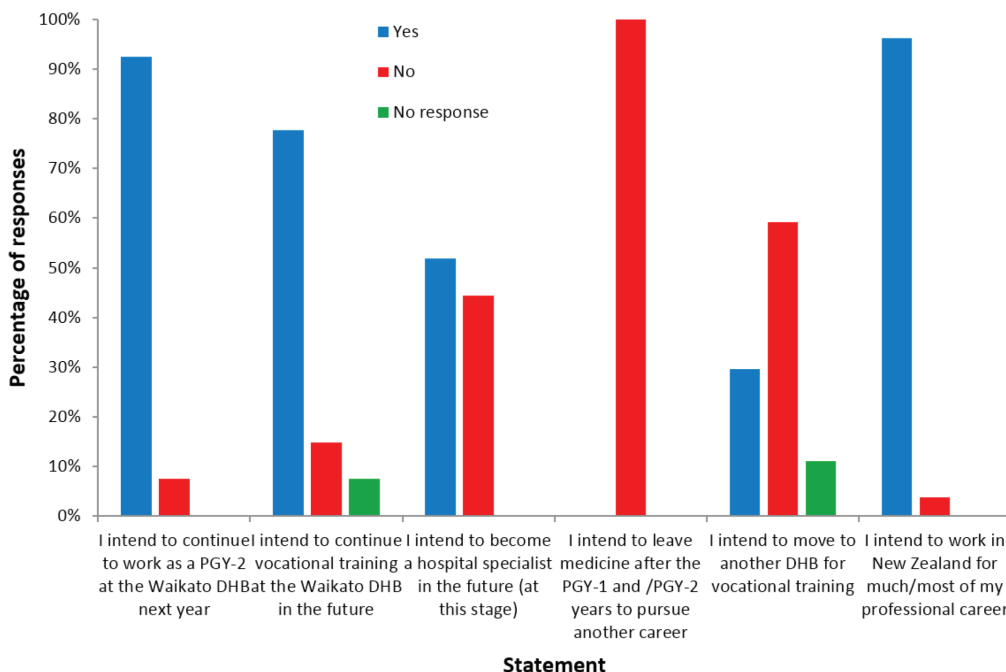
Figure 6: Future intentions of the 2016 PGY-1 cohort.



Discussion

This was a single site study. To improve the power of the study, data was gathered over a two-year period rather than a single year. Two-thirds of the house officers indicated that the current workplace represented their first choice. However, between 37–40% had not obtained the hospital of their first choice. This study was unable to determine whether they were offered employment in the top four preferences as other studies showed.

Waikato DHB was viewed favourably by both our cohorts, regardless of social (family, friends) and experience factors. Familial associations differed quite a lot between the cohorts (27% vs 48% respectively), however, this difference did not result in any significant change to the selection of Waikato DHB as the first DHB of choice for either year.

In addition, many PGY-1s chose Waikato, despite not training at the Waikato Clinical Campus, suggesting only a limited effect of prior exposure at Waikato as a mitigating factor. These findings indicate the possibility of another (as yet unknown) factor or factors that leads to our PGY-1s decision to apply for post-graduate training at Waikato DHB. Other studies have cited good working conditions and geographical location as being pivotal factors in choosing post-graduate hospital training positions.[3] Our survey was limited in regards to the types of questions asked about choice; however, a qualitative approach (eg semi-structured interviewing) could provide insight into what are the key considerations for prospective PGY-1 doctors when evaluating their options.

The satisfaction of the ACE system may have changed in the past 2–3 years. Only 83–88.9% of the respondents were either somewhat satisfied or extremely satisfied with their ACE allocation and was a reduction from previous national audit.[1] For those PGY-1s based at the hospital, high expectation existed that learning objectives for the internship year would be achieved.

An oversupply of trainee interns (TIs) has resulted in the exclusion, from the first round of matching through the ACE system, of the international student cohort. These are TIs who are neither New Zealand citizens nor permanent residents, and who hold student visas. International students may still obtain work at various DHBs, but may commence later in the year and have less workplace choice often being restricted to the larger DHBs where a more rapid turnover of RMO occurs. Only a small group would have secured employment at the start

of internship and had been included in the survey. However, this survey did not capture the demographic details of respondents to identify this group and nor was the survey designed to capture the viewpoints of all international students, especially those who failed to obtain internship in November. However, New Zealand residents and citizens did not necessarily appear dissatisfied about the exclusion of foreign students from the first round of selection.

This study also aimed to briefly test various other RMO trends which have been documented in the past and have included loss of the RMO workforce to overseas and high rates of hospital specialisation intentions.

In the past, New Zealand medical graduates appeared to have had high expectations of overseas travel combined with working holidays. Various reasons for travel had been offered and included better earnings to pay off high student debt.[4] However, international changes to the medical workforce have noted the retention of the junior doctor workforce in New Zealand in recent years. This has been driven by the increased number of Australian medical graduates and restricted work opportunities in the UK for non-EEA (European Economic Area) medical graduates.[5] The General Medical Council (GMC) requirements for registration includes the satisfactory completion of a language skills test and two medical competence tests, part 2 of which must be completed in the UK. This study confirmed that 93% of the PGY-1 sample expected to work for most of their careers in New Zealand with less than 10% wanting to work abroad. In addition, obtaining a PGY-1 position held the expectation of remaining in the same hospital for the PGY-2 year with less than seven percent considering a change necessary after the first year of internship. This may remain consistent as a result of recent changes to New Zealand Medical Council requirements requiring 24-months employment and oversight; previously 12-months post-registration.

Both of our cohorts expressed a willingness to remain at Waikato DHB in order to further their careers, with opportunities to continue onto vocational training featuring strongly. The reasons behind this is unknown, however, factors such as consistency of learning, good working conditions and/or good vocational pathways available to RMOs may be potential influences. Future research into what motivates RMOs in their choice of vocational training locations, including possible comparative studies with other DHBs in New Zealand, is recommended.

Previous research has shown that hospital-based specialisations (specifically internal medicine and surgery) have been the most popular career choices among New Zealand post-graduates,[6] while a shortage exists within the general practice workforce.[7] It is too early to determine if the drop in interest in hospital-based specialisations in the 2016 cohort suggests a turnaround in this trend or if this is due to a cohort effect. It is acknowledged that in New Zealand, female graduates show higher interest in pursuing a career in general practice. However, there is no discernible difference in gender between the 2015 and 2016 cohorts; therefore, it is unlikely to be a factor here.

Conclusions

The ACE matching recruitment system has been in place in New Zealand for over 12 years. Our survey aimed to summarise perceived satisfaction with the ACE process across two PGY-1 cohorts placed at Waikato DHB, which may be representative of New Zealand PGY-1 cohorts in general. Further multi-site studies would be needed to verify whether this is a trend across New Zealand. Our findings show consistent trends across the two cohorts in regards to their reasons for selecting the DHB, satisfaction with ACE and future intentions, with some differences observed with familial background and interest in pursuing hospital-based specialties. This suggests that ACE remains a satisfactory recruiting system for junior doctors for their emerging medical careers.

Competing interests:
Nil.
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Author information:
Helen Clark, Medical Education Officer, Clinical Education and Training Unit Hamilton; Wayne de Beer, Director of Clinical Training, Clinical Education and Training Unit Hamilton; Veronique Gibbons, Team Leader – Clinical Effectiveness, Quality and Patient Safety, Waikato District Health Board, Hamilton.
Corresponding author:
Helen Clark, Waikato Hospital, Pembroke Street, Private Bag 3200, Hamilton 3240.
helen.clark@waikatodhb.health.nz
URL:
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