

Research Internships:

An evaluation of progression within and beyond the HEE/NIHR Integrated Clinical Academic Careers Programme

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Introduction

- Funded by Health Education England in 2018 to undertake an evaluation of progression beyond the NIHR/HEE Internship programmes (England)
- Focus = Nursing and Midwifery and Allied Health Professions (NMAHP)
- Multi-professional academic research team:
 - nursing
 - AHP (Diagnostic radiography; OT; physio)
 - information scientist; survey methodology / framework analysis expertise
- Two clinical practitioners (internship graduates)

The ICA Pathway



- Since 2014, HEE in partnership with the NIHR funded the Integrated Clinical Academic (ICA) careers programme
- Non-medical health professions (NMAHP)
- Internship = entry level programme that provides an introduction to all aspects of clinical research, including experiencing primary research in a clinical environment
- Regional Commissioning and Delivery = led by different organisations and commissioned by local HEE offices.

Progression Evaluation

- 4 cohorts commissioned in England since 2014 [n=~400]
- HEE funding ~ £10,000 per intern
- Purpose - to inform HEE future funding and training strategies

Research Aim:

To explore regional and **national perspectives** on the contribution of the internships to developing clinical academic careers

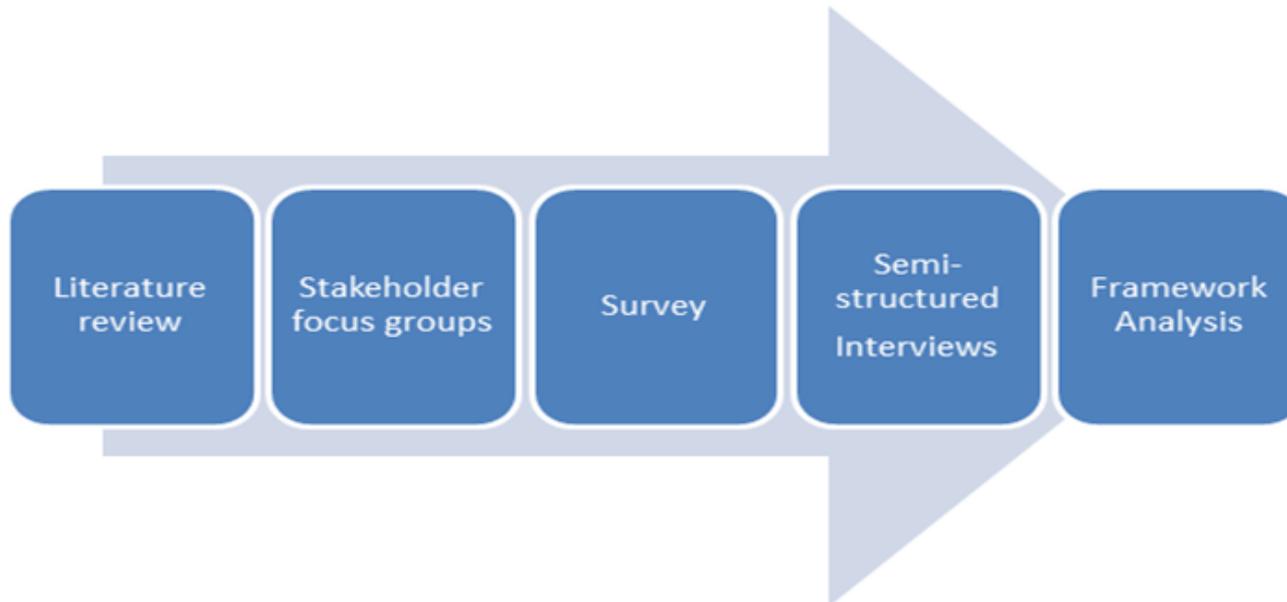
Q1: what barriers and facilitators influence progression

Q2: what individual factors influence progression

Q3: what programme factors influence progression

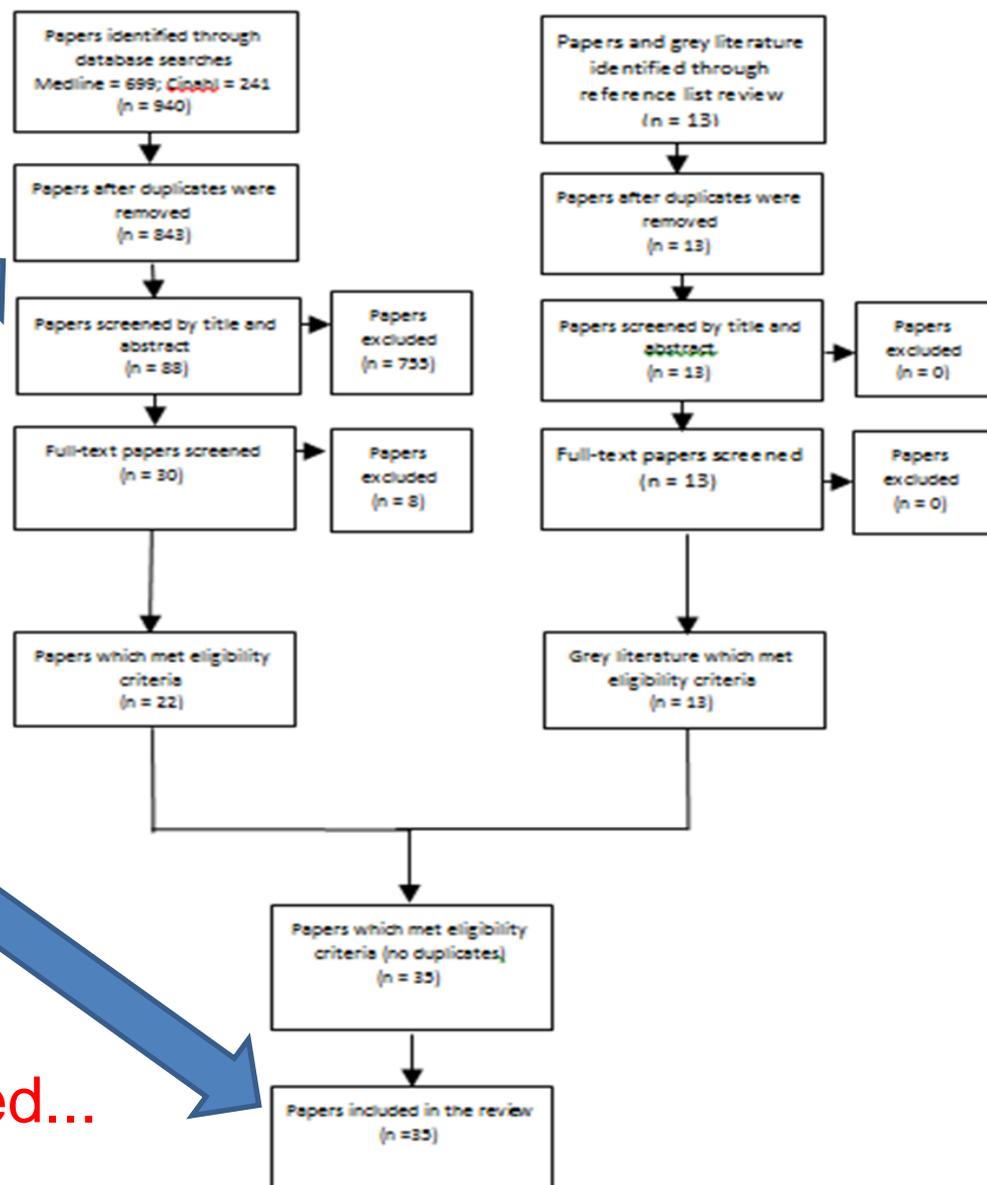
Methodology

- Ethical approval (host institution) and gatekeeper access (HEE)
- Mixed methods, combining qualitative with quantitative data collection in a sequential manner
- Each data collection stage informs the next phase
- Synthesis of data via Kirkpatrick Training Evaluation model
- A framework analysis process was used to integrate data and findings from each phase of the project.



Literature Review

- UK and international 'background and context' to inform data collection tools
- 843 papers + 13 'grey literature' documents after exclusion of duplicates
- 35 documents retained after full text screening



2 key findings emerged...

1. High perceived value of a clinical academic

A clinical academic is described as a health professional working clinically and involved in academia to try and find better health outcomes for practise. Clinical academics are expected to have leadership skills and be involved in teaching other healthcare staff.

Clinical academics are seen as the gatekeepers for the dissemination of information by translating research in to clinical practice

(Watson, Tang, & Knight, 2018; Westwood, et al., 2018; Health Education England (HEE), 2015; HEE/NIHR 2015; Kennedy, et al., 2010; Prime Minister's Commission, 2010).

2. UK workforce challenges

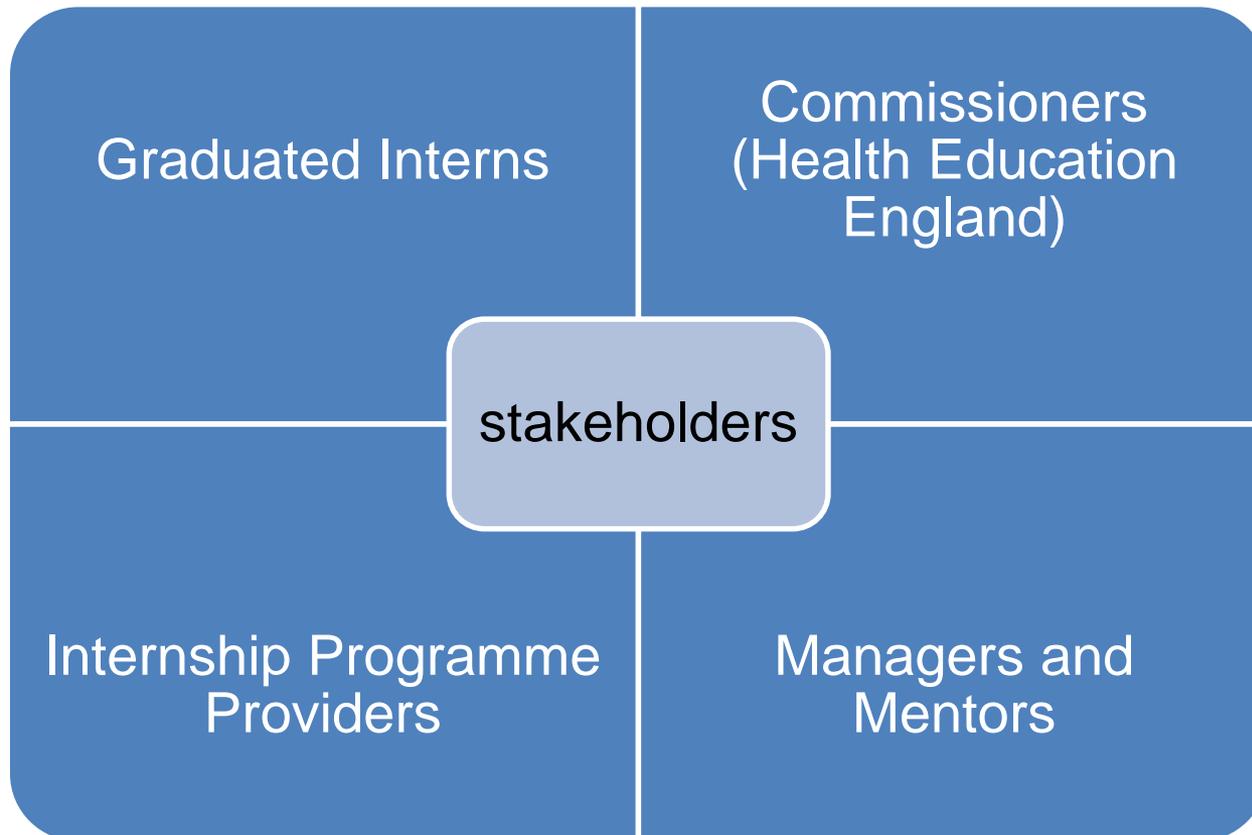
While the percentage of UK medical consultants in clinical academic roles is 5%, the percentage of NMAHPs involved in active research is less than 0.1% of the workforce (Hiley, et al., 2018).

Globally, the UK NMAHP workforce lags behind countries such as Poland (9.9% of nurses) and South Africa (20.5% of physiotherapists) for the percentage with a postgraduate qualification. Australia has 5% of nurses occupying post registration courses

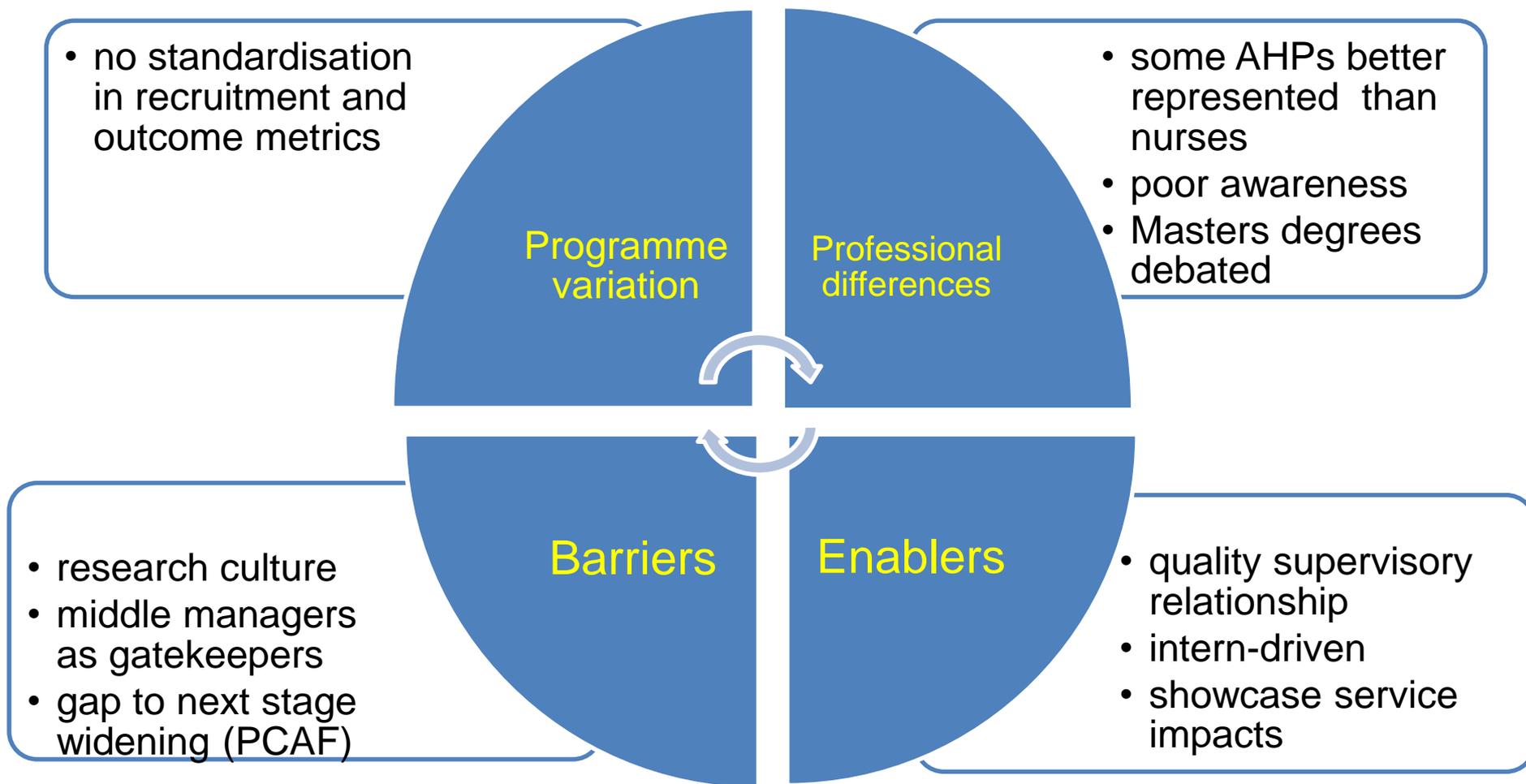
(Brayer & Marcinowicz, 2018; Cobbing, et al., 2017; Palmer, 2014).

Stakeholder focus groups

- Two groups of expert stakeholders (n=10)
- Aim = to highlight key issues and topics for inclusion in the survey and interviews.



Focus Group Themes



Questionnaire Survey

- Each regional internship programme was requested to provide contact emails for completed cohorts.
- An email, with a link to an online survey, was then forwarded on (+ 2 reminders).

	Distributed to	Responses from	% NMC registered
Graduated Interns	317	104 (33%)	38.4%
Mentors / Supervisors	139	36 (26%)	30.5%
Line Managers	132	21 (16%)	41.6%

Interns were predominantly female (86.5%), evenly spread across age groups (24 to 54) and across AfC banding (6 to 8)

Progression - Pay Banding

- 19 interns (18.2%) progressed to a higher pay band since completing the internship
- Only 1 intern had moved to a lower band

Pay Band Progressed to →

	Band 5	Band 6	Band 7	Band 8a	Band 8b	Other
Pay Band started at						
Band 5	5	3	2	0	0	1
Band 6	0	35	8	0	0	2
Band 7	0	0	24	4	0	1
Band 8a	0	1	0	7	2	1
Band 8b	0	0	0	0	3	1
Other	0	0	0	0	0	4

Progression - Role Advancement

- Interns reported changes in role titles that reflected progression:
 e.g. 'senior radiographer' moved to 'specialist radiographer';
 'antibiotic pharmacist' progressed to 'advanced medicines
 optimisation pharmacist'; 'midwife' to 'research midwife'.

	All interns responses (N=100)	NMC (N=40)	HCPC (N=59)
no role change	59 (59%)	24 (60%)	38 (64%)
enhanced role	40 (40%)	16 (40%)	20 (34%)

N.B. 1 intern indicated a decline in role, reason unclear

Progression - Applications to ICA pathway

	All intern responses (n=99)	NMC (n=39)	HCPC (n=55)
Application to any higher level of ICA pathway	53 (54%)	19 (49%)	32 (58%)
No application to ICA pathway	46 (46%)	20 (51%)	23 (42%)

- Applications from HCPC registered interns were slightly higher than from NMC registered individuals (58% to 49%)
- Significantly more HCPC-registered interns applied for NIHR doctoral level study (19% compared to 8%).

Progression - Success rates of applications to ICA pathway

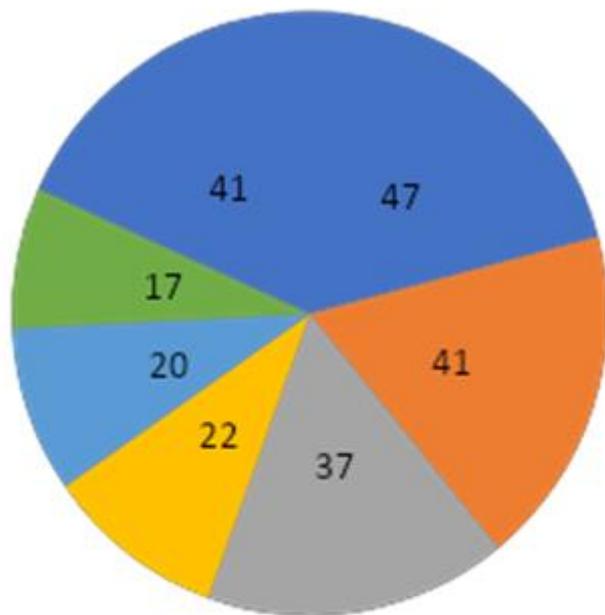
- Of the interns who did apply, approx half were successful

Registered body	HCPC	NMC
Success rates	50%	42%

- Further analysis: Applications and success more likely from those in 45+ age band; occupying AfC Band 7 roles, and attaining post-registration Masters degrees.
- N.B. Interns also applied for other sources of funding to support the next stages of their clinical academic career

Other sources of funding	Intern numbers	Success rate %
Professional body & charities	24	71
Other career pathway funding	21	52

Barriers to progression



- Release/support from work
- Limited number of placed on ICA programme
- Funding
- Middle managers being the gatekeepers to access
- Widening gap between internship and PCAF
- Middle management reluctant to support PCAF
- no response

Some of these intern-reported barriers were investigated further in the interview phase:

10 semi-structured telephone interviews

Interns, managers and mentors from different regions

Challenges Identified in Interviews

When I've spoken to people outside of the region there isn't a set transparent clear process on how people get selected for these courses... it could seem quite unfair. [IV5I]

- Inequity of dissemination of Internship information (professional differences)
- Variable admissions processes

Entry to Internship

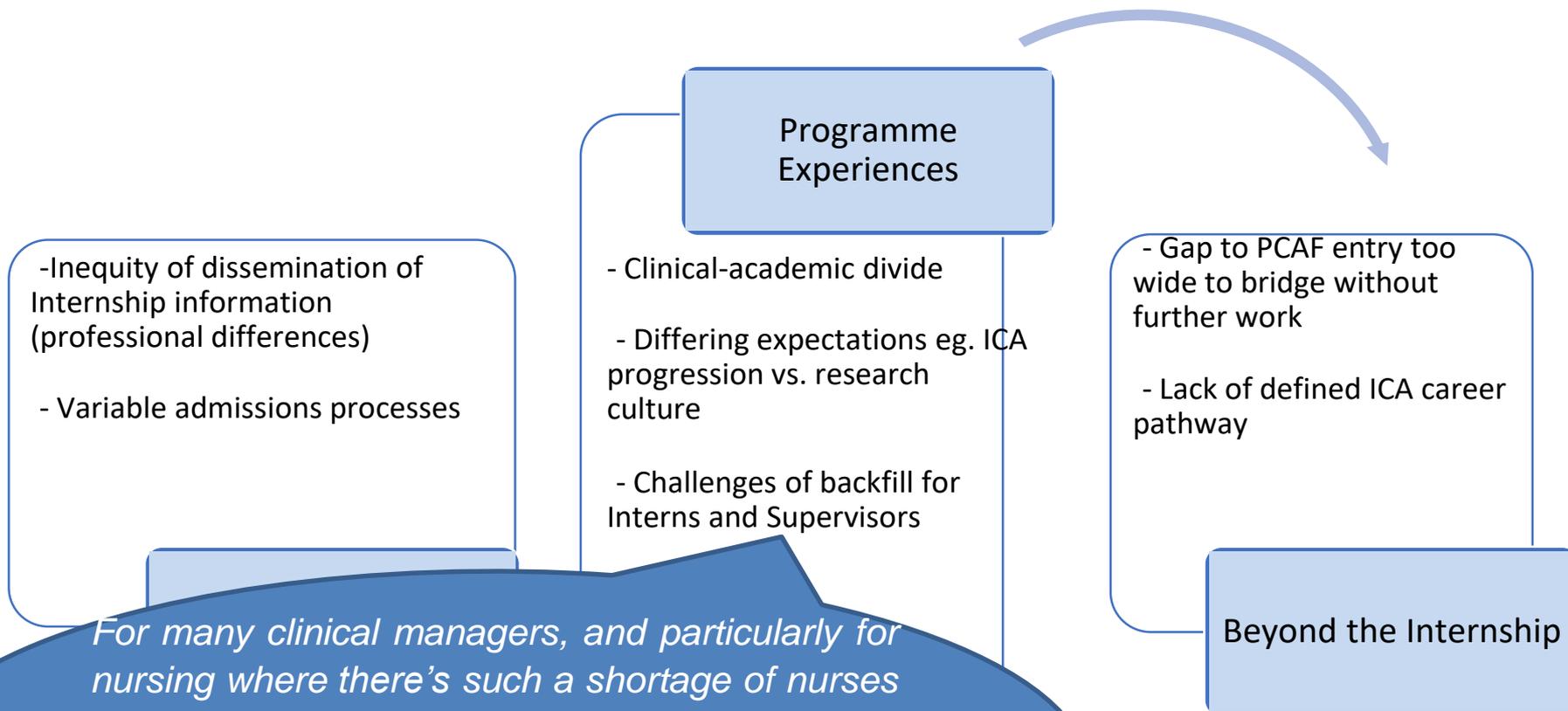
- High expectations eg. ICA progression vs. research culture
- Challenges of backfill for Interns and Supervisors

- Lack of defined ICA career pathway

Beyond the Internship



Challenges Identified in Interviews



For many clinical managers, and particularly for nursing where there's such a shortage of nurses in practice, I think sometimes it's not that the managers don't want to support these things... they just don't have anybody available that will facilitate that person being out for all those periods of time. [IV2M]

Challenges Identified in Interviews

*As an early career researcher ...
unless there's a really clear
infrastructure in place for you to
follow you're kind of given money and
then cast off a little bit. Well it
certainly feels like that ... [IV81]*

- Inequity of disseminating
Internship information
(professional differences)

- Variable admissions processes

Entry to Internship

- Differing expectations
progression vs. research
culture

- Challenges of backfill for
Interns and Supervisors

- Gap to PCAF entry too
wide to bridge without
further work

- Lack of defined ICA career
pathway

Beyond the Internship

Perceived value of the Internship

- Valued by interns, mentors and managers alike. Positive impact upon confidence, patient care and the dept in which they work.

I would say go for it... it's a great opportunity. My experience was really positive. It helps you to understand really quite well what a clinical academic career might look like. And gives you time and space decide whether that's the right path for you [IV7I]

- First step in developing a departmental research culture:

...it really was quite an unknown. It was the first member of our team going through it...I the line manager hadn't appreciated the positive...impact that it was going to have on the wider department. And that certainly is something that has now rippled through the rest of the department [IV6 LM]

- **HOWEVER**, many challenges persist in enabling NMAHP staff to engage with activities to develop research capacity, even within this well-funded supportive programme...

Climbing the ICA career mountain

ICA programme is not the only route to a clinical academic career; graduate interns are also accessing other sources of funding and support.

Gap between Internship and next stage (PCAF) was perceived to be widening. 46% don't apply and 48% unsuccessful with their application (60% for PCAF).

Service provision challenges: middle managers experience barriers to recruitment, effective back-fill and progression beyond the Internship. [esp. small professions and service depts.]

Admissions and recruitment: regionally-diverse and arguably inequitable. Expectations vary, with some programmes highly selective, and others offering wider 'taster' opportunities. Dissemination of opportunities poor.



Final Thoughts

While national developments such as ACP / Consultant Practice are raising the profile of research as a component of clinical roles, the pursuit of a clinical-academic career will continue to be elusive for many in the absence of a defined research career structure and visible and proactive role models for all NMAHPs.

A national approach to commissioning Internship programmes may be beneficial to improve marketing, ensure equity of access and provide consistent support to link into the next stage of the pathway.

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