NDTP Developmental Funding Report 2015 -2016

Financial Overview NDTP Reports July 2016

Project Name	NDTP Grant Amount Awarded	Spend Overview		
		Personnel Costs Committed (Annualised): Research Personnel Appointed 03/08/2016	Other ('Non Pay') Spend	Total Spend To-Date (Including Committed Personnel Costs)
Hospital Induction Portal for Interns in the West Northwest Intern Network NDTP	€27,500.00	-	€9,950.00	€9,950.00
IJuMP Peer Teaching Programme ***(Pls. refer to note on IJuMP report under 'Finance' Section	€28,050.00	-	€38,725.54	***€38,725.54
National Burnout Survey NDTP	€3,850.00	-	€1,079.14	€1,079.14
Intern App - to support decision making in Acute Care NDTP	€33,000.00	-	-	€0.00
Resilience Programme NDTP *(Awaiting transfer of funds from NDTP)*	€59,000.00	€43,056.00	-	€43,056.00
Intern Post Quality Evaluation Programme NDTP *(Awaiting transfer of funds from NDTP)*	€46,556.00	€43,056.00	-	€43,056.00
Project Manager - Appointed 11th July 2016 - Assigned Across 6 Projects	€72,621.00	€72,621.00	-	€72,621.00
TOTAL	**€270,577.00**	**€158,733.00**	**€49,754.68**	**€208,487.68**

Hospital Induction Portal for Interns in the West Northwest Intern Network NDTP Report July 2016

Project summary

The Hospital Induction Portal is an information and learning site designed and developed by a multidisciplinary hospital team for iterns in the West Northwest intern network to improve their orientation onto the clinical site and levels of preparedness for clinical practice.

The orientation of junior doctors onto new clinical sites every July is a particularly stressful time associated with an increase in error and a 6% reported increase in patient deaths. One group of junior doctors who are particularly vunerable are interns. They are making a very big transition – from medical student to junior doctor and the bridging of this transitioning gap with a short induction period is insufficient. Interns internationally report a high rate of lack of preparedness for clinical practice and the Your Training Counts Report from the Medical Council in 2014 & 2015 reports this rate as 3 in every 5 interns in Ireland. A multidisciplinary approach to the development of an online portal with core content from key stakeholders (doctors, nurses, pharmacists, allied health professionals and administrators) in consultation with interns was undertaken.

Objectives

1. Identify the areas that are most problemtatic for newly graduated doctors (interns) commencing clinical practice;
2. Provide the allied health professionals with a method to address specific areas of error commonly associated with the beginning of internship;
3. Build on and improve the traditional face-to-face induction programme that is mandatory for all interns;

4. Develop a platform and interface that is user friendly and video based with up to date site specific content and is available to interns for 6 weeks prior to commencing internship from their own devices;
5. Improve interns' level of preparedness for clincial practice;
6. Scale and roll out the portal to other intern networks and beyind (NCHDS etc);
7. Evaluate use and user satisfaction with the portal and address additional requirements.

Financial Information

Grant amount awarded:
€27,500
Total Spend (Non Pay) to-date **€9,950.00**
• **Plus Project Manager Personnel cost split across 6 projects. (Please refer to Financial Overview Sheet)
Detail non pay:
• IMS spend for portal build €6,875.76 + €2824.24 = €9700
• Patrick Heneghan costs €250.00

Progress to date. The development and scaling of the Hospital Induction Portal occurred in 4 phases:

Needs assessment. A focus group and survey of UCHG interns at the end of internship (June 2014 and June 2015) was conducted.

Working group. Based upon the needs assessment a working group of allied health professionals and educators and clinicians involved in intern education was established and in consultation with AV and IT technicians the best way to deliver impactful educational materials

was decided upon – the group chose short video and screen recordings and decided to limit paper based content and documentation.

Initial platform build. A prototype of the intern induction portal website was built and a small amount of content developed and uploaded (June 2015). The prototype Hospital Induction Portal was released to 131 interns in the West Northwest Intern Training Network on the 5th June 2015. By the 6th July, 100% of internss had logged on and completed the user satisfaction survey.

Development of content and scaling. With support from the NDTP development fund, the platform was expanded and the content increased to reflect the additional requirements outlined by users in June 2015 to include:

- Information on living and working in the region
- Hospital staff supports
- Occupational health information
- National guidelines (NEWS and Sepsis Six)

The content was made available to 3 other intern networks (DNE, South and MW) and to the NCHDs in the Soalta Univeristy Health Care Group in June and July 2016.

Induction Portal WNW Use and Self Assessment

132/133 WNW intern logged on and completed portal and self assessment section.

104 WNW interns completed the feedback and user staisfaction survey – see results below.

User stats from other networks and NCHD portals awaited.

Links and log-ins
http://hospitalinduction.com
Access WNW intern and Saolta NCHD sites:
Username: Guest
Password: Guest

Induction Portal User Satisfaction Survey Results

Completed by 104 WNW interns.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
The portal was easy to navigate	1%	1%	4.8%	58.7%	34.6%
I liked using the portal	3.8%	4.8%	14.4%	50%	26%
The portal was useful for me	1%	1.9%	6.7%	57.7%	31.7%
The portal helped me to prepare for my clinical job	1%	3.8%	11.5%	51.9%	30.8%
	Yes		**No**		
Would you find access to any part of this portal useful beyond the induction period	Y 97.7%		N 2.3%		

What additional content, if any, would you like to be added to the portal?

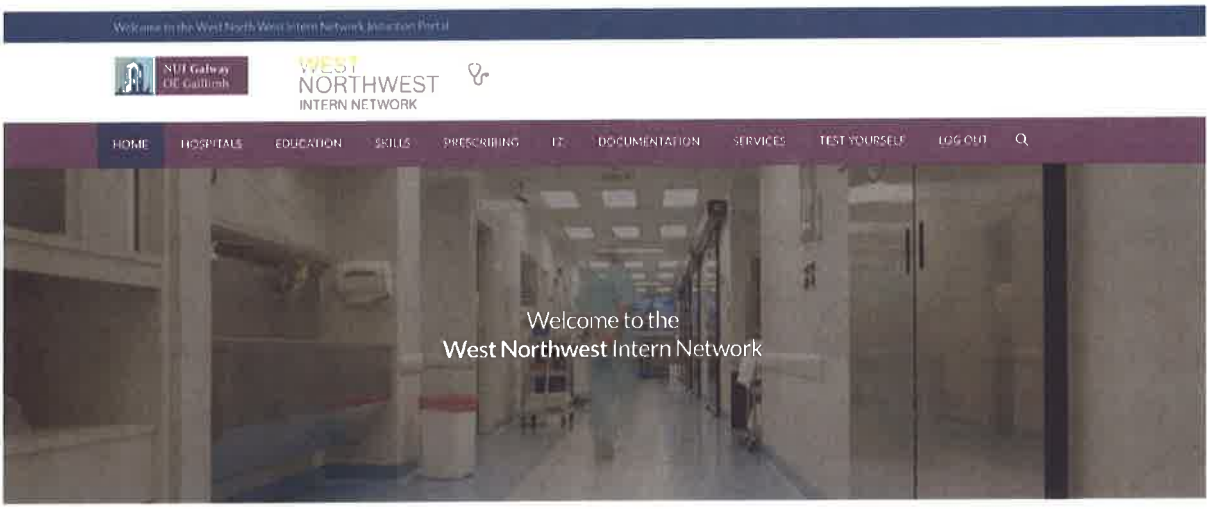
- More prescribing support
- Checklist of tasks to complete during induction
- More information on individual hospital (maps etc.) and local area (places to eat etc.)
- Additional videos (e.g., IT training, labs training etc.)
- Medical emergency support
- On call advice

Please list sections/topics that are on the portal that would be useful to have access to beyond the induction period?

- Procedural guidelines
- Prescribing guidelines
- Education document with useful dates

- Clinical skills guidance
- Info on general procedures and services of the hospital
- Guidance on admissions and discharges
- IT videos
- CV writing

Images



Congratulations on your new intern post and welcome to the West Northwest Intern Network induction portal

IJuMP Peer Teaching Programme NDTP Report July 2016

Project summary

The aim of this project is to design, deliver and evaluate the effectiveness of a near peer teaching and mentoring programme for interns. Having experience and training in teaching and learning is an important part of personal and professional development in internship. Furthermore, evidence of acquisition of teaching skills are valued by medical schools, teaching hospitals and training bodies and improve career prospects for interns. The benefits to both teacher/mentor and pupil/mentee are being evaluated in this programme with a view to recommendations for national rollout and scaling to the NCHD population.

Abstract[1]

Background: Peer teaching programmes have become increasingly popular in recent years. Such programmes may offer important benefits for the students, the peer tutors, the institution and patients. Although resistance to peer teaching programmes has been identified among medical school faculty, research on peer teaching programmes has typically focused on the students' experiences and perceptions, rather than those of the peer tutors or senior doctors/medical faculty. The current study aimed to conduct a comprehensive, multi-perspective evaluation of a near peer teaching programme delivered by interns for final year medical students in the Republic of Ireland.

Methods: This study employed a mixed method research design, using both interviews and questionnaires to assess students' (n=130), interns' (n=49), and medical faculty or senior doctors' (n=29) perceptions and experiences of the intern junior mentoring programme (IJuMP).

Results: Perceptions of the programme were almost uniformly positive across the three user groups. Interns and senior doctors/faculty members reported the programme to be of great benefit for both the students and interns. Medical students reported finding the tutorials useful, accessible, and enjoyable. Scheduling and time management issues were the most frequently reported issue.

Conclusions: This mixed-method multi-user evaluation of the IJuMP peer teaching programme suggests that it is well received by students, interns, and senior doctors, and offers benefits for the teachers and the taught. Future iterations of the programme should include greater assistance in scheduling sessions.

[1] Preliminary data abstract published in Irish Journal of Medical Science Volume 185 Supplement 5 10.1007/s11845-016-1467-x

Financial Information

Grant amount awarded:
€ 28,000
Spend Total (Non Pay) to date **€38,725.54** ***Total NDTP funds received on IJuMP project spent with additional costs supported by School of Medicine
• **Plus Project Manager Personnel cost split across 6 projects. (Please refer to Financial Overview Sheet)
Detail 'non pay':
• IMS (IJuMP Book) €9,520.20
• Standard printers €9,345
• Photographer - Patrick Heneghan €1,313.95
• Catering Campbell's Nov 2015 and Feb 2016 €1,453.50
• All oxford medical TTT session (3) €17,092.89

Progress to date

- Interns recruited to participate and selected as teachers on basis of interview performance and final med score.
- Oxford Train-the-Teacher course, specifically tailored for medical professionals, held at NUI Galway in September 2015 and January 2016 in order to train participating interns to deliver effective teaching sessions.
- IJuMP tutorials delivered by interns over a 24 week period (two 12 week periods across semester one and semester two).
- Two "Your Event Your Future" evenings held in University Hospital Galway, September 2015 and February 2016, in advance of stage 1 an 2 of the national intern application process, where interns delivered meet the intern sessions and

basic skills training (cannulation, venipuncture etc.) in a simulated environment, to final year medical students.

- A book of "Medical Students Study Notes" that detailed common conditions and other information pertaining to a variety of specialties produced by participating interns. Content reviewed by senior doctors and resulting book provided to final year medical students.
- Mixed-method, multi-user evaluation of the programme carried out by surveying and conducting interviews among medical students, interns, and senior doctors/faculty members.
- IJuMP awards ceremony held during intern induction week at GUH (4th July 2016). All participating interns recognised and the two best intern teachers, as voted by final year medical students, were presented with medals.
- Data analysis from programme evaluation completed.
- Initial Draft of journal article describing the programme completed.
- Videos and photos of award ceremony edited and being prepared for Press release.
- Abstract publication of initial programme design in Irish Journal of Medical Science Volume 185 Supplement 5 10.1007/s11845-016-1467-x

Multi-user evaluation of the IJuMP peer teaching programme.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
IJUMP will contribute to preparedness for internship					
Medical students	-	7.4%	30.3%	50.8%	11.5%
Interns	2.1%	4.2%	10.2%	58.3%	25%
Senior Doctors/Faculty	-	-	-	48.3%	51.7%
IJUMP will provide a clearer understanding of an intern's role					
Medical students	0.8%	7.4%	14.8%	56.6%	20.5%
Interns	4.3%	4.3%	25.5%	51.5%	14.9%
Senior Doctors/Faculty	-	3.4%	-	27.6%	69%
IJUMP will contribute to improved exam performance					
Medical students	0.8%	6.6%	23.8%	52.5%	16.4%
Interns	-	2.1%	4.2%	47.9%	45.8%
Senior Doctors/Faculty	-	-	6.9%	44.8%	48.3%
IJUMP provides information that is not available elsewhere					
Medical students	0.8%	5.8%	27.3%	44.6%	21.5%
Interns	-	8.3%	22.9%	50%	18.8%
Senior Doctors/Faculty			13.8%	27.6%	58.6%
IJUMP will be beneficial to participating interns					
Senior Doctors/Faculty	-	-	-	34.5%	65.5%

Ratings of the IJuMP programme on a scale of 1-10 among the user groups.

User Group	Value	Satisfaction
Medical Students	8.2 (SD=1.5; range=5-10).	7.7 (SD=1.6; range= 2-10)
Interns	8.2 (SD=1; range=6-10)	7.6 (SD=1; range= 5-10)
Senior Doctors/Faculty	9.1 (SD=1; range=7-10)	9 (SD=1.1; range= 7-10)

Intern perceptions of the programme arising from semi-structured interviews:

Intern's perceived participation in the programme had a very positive impact on their own knowledge. For example, one intern noted that *"It helped me revise my own knowledge. When you're in a specific specialty it's easy to gain knowledge in that particular specialty and forget other knowledge so it's really good revision."* Other perceived benefits for interns included the development of their teaching abilities, improved their career prospects, provided them with experience of being a role model or mentor, and improved their time management skills.

The key benefits for students, as perceived by interns, were improvements in their knowledge and exam preparedness, increased opportunities in the clinical environment, and the informality of the teaching sessions. For example, one intern noted that *"The tutorials were run in a very relaxed and non-intimidating manner so the students were comfortable to ask questions and didn't worry about a senior physician getting angry at them for not knowing something or embarrassing themselves for asking a stupid question."*, while another remarked that *"[IJuMP] was also very good for practical skills such as doing bloods and cannulas. Not just seeing them being done but getting the opportunity to actually do them yourself... When I started as an intern there was lots of things that I had never actually done myself so I think it's a good opportunity to do these things."*

Challenges reported by interns included the relative lack of a knowledge gap between the two groups, time management, scheduling sessions, finding suitable

patients for the bedsides, and low student engagement. The rewarding aspects of the programme included student appreciation and gratitude, observing student improvement, promoting a better model of medical education, and benefits for the patients. One intern commented that *"It was fantastic hearing that the students enjoyed the tutorials. To know that you may have made them feel more comfortable in the run up to such a stressful event like their finals felt great... made all the work completely worthwhile."* while another noted that *"it was very nice to see when some patients who you take them to, who wouldn't get a lot of visitors or maybe live far away, really enjoyed the interactions with the medical students."*

iJuMP video links

Password is iJump2016

https://vimeo.com/174197007

https://vimeo.com/174197006

https://vimeo.com/174197008

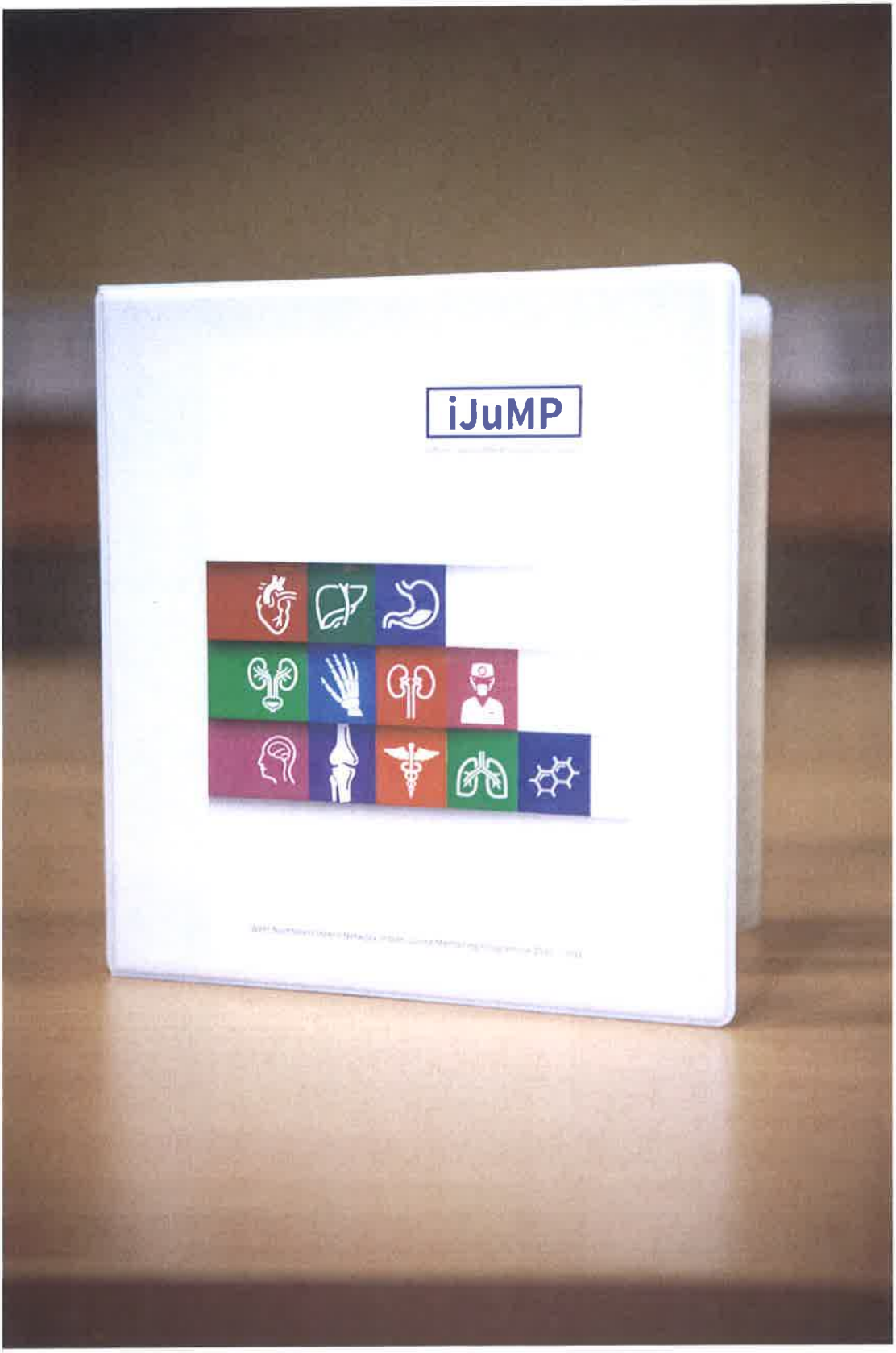
https://vimeo.com/174197009

https://vimeo.com/174197010

https://vimeo.com/174197007

iJuMP photos


Healthcare Domains


iJuMP

National Burnout Survey NDTP Report July 2016

Project summary

The aim of this piece of work is to collect data on burnout in the intern population longitudinally over their intern year and to link high burnout rates with self-reported error rates. The research is building on the data that has been previously collected by the same research team, on stress levels in the intern population (2012) and aims to propose some solutions to the high rates of stress and burnout. Preliminary data is the driver for a newly started project on building resilience and mental toughness in interns.

Abstract

Background. Burnout constitutes a significant problem among physicians which impacts negatively upon both the doctor and their patients. Previous research has indicated that burnout is prevalent amongst junior doctors, and there may be a link between burnout and medical error.

Aims. To identify levels of burnout among interns in Ireland, and evaluate whether the risk of burnout is higher among interns who have made a medical error.

Methods. The Maslach Burnout Inventory-Human Services Survey (MBI- HSS) was distributed to all interns in the Republic of Ireland following ethical approval from all intern training networks. The survey was anonymous and distributed online.

Results. In total, 228 interns (response rate of 38%) completed the survey. Of these, 47.2% reported high levels of emotional exhaustion, 44.2% scored high on depersonalisation and 53.8% presented with low levels of personal accomplishment. In total, 20.2% presented with all three symptoms, fulfilling the criteria for burnout. A total of 66.7% of the respondents had made a medical error in the last three months that had played on their mind. The risk of burnout for those interns that reported making a medical error was no higher than those that did not report making a medical error.

Conclusions. A considerable portion of interns in Ireland report high levels of emotional exhaustion and of depersonalization, and low levels of personal accomplishment. These findings suggest that Irish interns are at a higher risk of burnout than interns in other countries. The study is ongoing and longitudinal but the initial data demonstrates that there is a need to examine how the risk of burnout can be reduced in the intern population. An understanding of the causes and the risks of

burnout and its association with making an error, is not only relevant during internship, but is important as interns progress in their medical careers. [1]

Financial Information

Grant amount awarded
€ 3,850.00
Spend Total (Non Pay) to-date **€1,079.14**
• **Plus Project Manager Personnel cost split across 6 projects. (Please refer to Financial Overview Sheet)
Detail 'non pay':
• Travel Costs: €113.14
• IPad for draw: €466
• Incentives for interns in other networks: €500

[1] Preliminary data abstract published in Irish Journal of Medical Science Volume 185 Supplement 5 10.1007/s11845-016-1467-x

Progress to date

- Data collection, consisting of burnout survey and information on errors made, completed for both time points in this study (i.e., early internship, ~ three months in, and late internship, ~10 months in). Survey completed by 309 interns at time point 1 and 321 interns at time point 2.
- Data analysis conducted using data from time point 1 (see above abstract which presents this data). Published in Irish Journal of Medical Science Volume 185 Supplement 5 10.1007/s11845-016-1467-x
- Data analysis ongoing for data from time point 2.
- 25 interviews have been conducted to date with interns investigating, in detail, errors that they have made during their first year of clinical practice. We are aiming to collect 30 – 35 in total. Data collection for this phase of the study will continue over the coming year.
- A peer-reviewed journal article will be prepared describing the results from the surveying of the interns at two time points and will focus on whether burnout levels change across the intern year and whether burnout is associated with error.
- Data analysis for the intern error data arising from the interview phase of this study will be initiated upon completion of data collection (it is anticipated that data collection will be completed by the end of 2016) and a peer-reviewed journal article will be prepared describing the results.

Data from Burnout Survey Timepoint 1

The analysis of preliminary data from timepoint 1 suggests that:

- 47.2% of participating interns reported high levels of emotional exhaustion
- 44.2% of participating interns scored high on depersonalisation
- 53.8% of participating interns presented with low levels of personal accomplishment.
- In total, 20.2% presented with all three symptoms, fulfilling the criteria for burnout.
- A total of 66.7% of the respondents had made a medical error in the last three months that had played on their mind. The risk of burnout for those interns that reported making a medical error was no higher than those that did not report making a medical error.

Comparison of burnout rates among interns with those reported by other studies

Study	Number of participants	Role	Location	EE score (SD)	DP score (SD)	PA score (SD)
The Current Study	228	Interns	Republic of Ireland	26.2 (10.9)	11.9 (6.7)	29.8 (7.1)
Nason et al (2013)	27	Interns	Republic of Ireland	23.4	9.4	18.9
Rosen et al (2006)	47	Interns	US	16.1	6.9	5.9
O'Dea et al (2015)	683	General Practitioners	Republic of Ireland	28.0 (12.4)	9.7 (6.7)	38.0 (6.3)

Note. Emotional Exhaustion=EE, Depersonalisation=DP, Personal Accomplishment=PA

Intern App - to Support Decision Making in Acute Care NDTP Report July 2016

Project summary

Based on data and observations of interns early in clinical practice, the decision making that is required for the identification and initial management of the unwell patient is consistently lacking in newly qualified doctors. Since 2012, the West Northwest Intern Training Network has delivered training in acute care management to incoming interns at intern bootcamp – a hi-fidelity manikin based simulation programme at SIMWEST in Galway University Hospital.

One of the key areas in decision making for junior learners is the use of checklists and protocols. This can be seen in practice during ACS scenarios where all healthcare participants are trained to follow AHA protocols to improve decision making and communication. However, only the ACS protocols are readily available on wards. More recently the national clinical guidelines and acute care group have recognised this and have introduced a number of one page guidelines for the management of the septic patients, gradually becoming available on wards nationally.

Interns report that they would like to have easy access to flow sheets and checklists for the management of common acute care scenarios.

There are some apps currently available but most are not updated or appropriate for interns; nor are they particularly user friendly.

The aim of this project is to identify the acute scenarios that an intern commonly sees and design, develop and pilot a checklist and flow sheet for acute care scenarios that is user friendly. The check lists will be supported by links to educational content that can be easily updated. The scaling of the app can be addressed once the initial set of scenario checklists have been achieved.

Abstract[1]

Background. Research has consistently found that high percentages of newly graduated medical students report feeling under-prepared to begin working in a hospital, and lack the skills necessary to perform the job of a junior doctor. **Aims.** To: identify the conditions that interns are commonly called to manage; and to identify the level of ease in managing each of these conditions.

Methods. Pilot research was carried out with non-consultant hospital doctors and Consultants to identify a list of conditions that interns are commonly called to manage. This pilot research resulted in the identification of 21 conditions. A questionnaire was designed to identify how frequently interns are called to manage these 21 conditions from (1) 'never' to (5) 'very often', and their level of ease in the management of each of these conditions from (1) 'very easy' to (5) 'very difficult.' The questionnaire was distributed to interns from one intern training network using a combination of anonymous online and paper-questionnaire.

Results. A total of 75 interns (response rate of 57%) completed the survey. There were five conditions to which more than a quarter of participants indicated occurred 'often' or 'very often' and they found 'difficult' or 'very difficult.' These conditions were desaturating patient (29.1% of participants), shortness of breath (29.1%), acute confusion (29.1%), severe pain (30.9%), and electrolyte imbalance (30.9%). **Conclusions.** There are limits to the time and resources available for training. The findings from this research will allow for the development of solutions or aids to support interns in the management of difficult clinical situations.

[1] Preliminary data abstract published in Irish Journal of Medical Science Volume 185 Supplement 5 10.1007/s11845-016-1467-x

Financial Information

Grant amount awarded
€ 33,000.00
Spend Total to date:
• **Project Manager Personnel cost split across 6 projects.
(Please refer to Financial Overview Sheet)

Progress to date

- There has been a delay on the appointment of a project manager to work across the projects due to University regulations. The project manager post was approved and appointed end of July 2016.
- The surveys and interviews have been conducted and raw data has been collected and evaluated. A digital educationalist with expertise in healthcare programmes has been engaged to consult and the app build will commence end of August.
- In total, 75 interns completed a survey designed to assess the frequency with which they encounter 21 specific acute situations (e.g., tachycardia, atrial fibrillation, haematemesis) and the perceived difficulty of managing each of these situations. Raw data in appendix A.
- Data analysis conducted using survey data (see above abstract which presents a preliminary version data) allowed for the determinations of frequent acute situations that interns find difficult to manage.
- This data is to be used to inform the development of an application to support interns in the management of such situations. This application will support interns in conducting an examination, taking a history, ordering investigations, prescribing medications, and developing a treatment plan for patients that present with the various acute care conditions included within the survey.

- In order to limit the number of updates – there will be a resource library linked to each condition.
- Project manager/digital educationalist Ms. Mairin Murray engaged – has worked on HSELanD projects in the past.
- Initial meeting with Mairin to discuss build and content so that she can engage a suitable app builder.

Data from Acute Care Scenarios Survey

Condition	**Frequency encountered**	**Ease of management**	**% often/very often AND difficult/ very difficult**
	Modal response	**Modal response**	
Tachycardia	Often	Neither difficult nor easy	21.8
Bradycardia	Rarely	Difficult	0
Hypotension	Often	Easy	14.5
Hypertension	Often	Difficult	14.5
Desaturating patient	Often	Difficult	29.1
Pyrexia	Often	Easy	9.1
Shortness of breath	Often	Difficult	29.1
Atrial fibrillation	Sometimes	Difficult	12.7
Chest pain	Often	Easy	12.7
Acute confusion	Sometimes	Difficult	29.1
Severe pain	Sometimes	Difficult	30.9
Nausea & vomiting	Often	Easy	5.5
Hematemesis	Never	Difficult	0
Stroke	Never	Difficult	1.8
Diabetic ketoacidosis	Never	Difficult	0
Hypoglycaemia	Never	Difficult	0
Low urine output	Rarely	Difficult	10.9
Fluid overload	Often	Easy	10.9
Anaphylaxis	Never	Very difficult	0
Sepsis	Sometimes	Difficult	14.5
Electrolyte disturbance	Often	Difficult	30.9

AAMC data on conditions a resident should be able to manage

1. chest pain

2. mental status changes

3. shortness of breath and hypoxemia

4. fever

5. hypotension and hypertension

6. tachycardia and arrhythmias (e.g., SVT, Afib, heart block)

7. oliguria, anuria, urinary retention

8. electrolyte abnormalities (e.g., hyponatremia, hyperkalemia)

9. hypoglycemia and hyperglycemia

Appendix A

75 interns responded (57 % response rate)

Mobile operating system used	n; %
Android	27; 36%
IOs	47; 62.7%
Other	1; 1.3%

10 most frequent acute situations managed

Situation/Issue	**Reported by: (n;%)**
Chest Pain	54; 72%
Pyrexia	34; 45.3%
Respiratory distress (tachypnoea, Dyspnoea, shortness of breath)	31; 41.3%
Hypotension	30; 40%
Desaturation	29; 38.7%
Tachycardia	22; 29.3%
Pain	17; 22.7%
Electrolyte Disturbance	14; 18.7%
Fall	14; 18.7%
Confusion	13;17.3%

10 most difficult acute situations managed

Situation/Issue	**Reported by: (n;%)**
Confusion	25; 33.3%
Respiratory distress	18; 24%
Chest Pain	18; 24%
Hypotension	14; 18.7%
Falls	12; 16%
Pain	11; 14.7%
Seizures/Epilepsy	11; 14.7%
Agitation	9; 12%
Acute Urinary retention	9; 12%
Abdominal pain	9; 12%
Desaturation	9; 12%
Tachycardia	9; 12%

Please provide feedback on how frequently you are called to manage the following acute situations.

I deal with the following acute situations…	Never	Rarely	Sometimes	Often	Very often
Tachycardia	-	10.3% (7)	30.9% (21)	42.6% (29)	16.2% (11)
Bradycardia	2.9% (2)	50% (34)	36.8% (25)	10.3% (7)	-
Hypotension	-	5.9% (4)	29.4% (20)	55.9% (38)	17.6% (6)
Hypertension	-	16.2% (11)	29.4% (20)	36.8% (25)	17.6% (12)
Desaturating patient	-	13.2% (9)	23.5% (16)	47.1% (32)	16.2% (11)
Pyrexia	-	28.4% (19)	23.9% (16)	14.9% (10)	32.8% (22)
Shortness of breath	4.5% (3)	10.4% (7)	25.4% (17)	43.3% (29)	16.4% (11)
Atrial fibrillation	10.4% (7)	23.9% (16)	40.3% (27)	17.9% (12)	7.5% (5)
Chest pain	4.5% (3)	7.5% (5)	26.9% (18)	37.3% (25)	23.9% (16)
Acute confusion	9% (6)	13.4% (9)	40.3% (27)	26.9% (18)	10.4% (7)
Severe pain	3% (2)	16.4% (11)	37.3% (25)	31.3% (21)	11.9% (8)
Nausea and vomiting	1.5% (1)	11.9% (8)	32.8% (22)	34.3% (23)	19.4% (13)
Haematemsis	43.3% (29)	37.3% (25)	19.4% (13)	-	-
Stroke	49.3% (33)	38.8% (26)	7.5% (5)	4.5% (3)	-

Diabetic ketoacidosis	66.7% (44)	22.7% (15)	9.1% (6)	1.5% (1)	-
Hypoglycaemia	31.3% (21)	37.3% (25)	28.4% (19)	3% (2)	-
Low urine output	7.5% (5)	31.3% (21)	29.9% (20)	23.9% (16)	7.5% (5)
Fluid overload	9% (6)	17.9% (12)	31.3% (21)	35.8% (24)	6% (4)
Anaphylaxis	71.6% (48)	23.9% (16)	3% (2)	1.5% (1)	-
Sepsis	1.5% (1)	19.7% (13)	37.9% (25)	30.3% (20)	10.6% (7)
Electrolyte disturbance	1.5% (1)	6.1% (4)	31.8% (21)	39.4% (26)	21.2% (14)

Please provide feedback on how difficult you find the following acute situations to manage.

I find dealing with the following acute situations to be…	Very difficult	Difficult	Neither difficult nor easy	Easy	Very easy	I have not encountered this situation
Tachycardia	-	31.3% (20)	53.1% (34)	12.5% (8)	-	3.1% (2)
Bradycardia	1.6% (1)	42.2% (27)	34.4% (22)	12.5% (8)	-	9.4% (6)
Hypotension	1.6% (1)	20.3% (13)	34.4% (22)	42.4% (27)	1.6 % (1)	-
Hypertension	-	32.8% (21)	32.8% (21)	29.7% (19)	3.1 % (2)	1.6% (1)
Desaturating patient	7.8% (5)	42.2% (27)	26.6% (17)	23.4% (15)	-	-
Pyrexia	1.6% (1)	9.4% (6)	28.1% (18)	57.8% (37)	3.1 % (2)	-

Shortness of breath	3.2% (2)	44.4% (28)	33.3% (21)	14.3% (9)	-	4.8% (3)
Atrial fibrillation	6.3% (4)	38.1% (14)	25.4% (16)	14.3% (9)	1.6 % (1)	14.3% (9)
Chest pain	1.6% (1)	22.2% (14)	25.4% (16)	42.9% (27)	3.2 % (2)	4.8% (3)
Acute confusion	23.8% (15)	49.2% (31)	15.9% (10)	4.8% (3)	-	6.3% (4)
Severe pain	4.8% (3)	50.8% (32)	30.2% (19)	9.5% (6)	1.6 % (1)	3.2% (2)
Nausea and vomiting	1.6% (1)	11.1% (7)	30.2% (19)	49.2% (31)	4.8 % (3)	3.2% (2)
Haematemsis	9.7% (6)	30.6% (19)	12.9% (8)	4.8% (3)	-	41.9% (26)
Stroke	19% (12)	28.6% (18)	9.5% (6)	3.2% (2)	-	39.7% (25)
Diabetic ketoacidosis	17.5% (11)	20.6% (13)	9.5% (6)	3.2% (2)	-	49.2% (31)
Hypoglycaemia	1.6% (1)	29% (18)	11.3% (7)	29% (18)	-	29% (18)
Low urine output	3.2% (2)	38.1% (24)	31.7% (20)	19% (12)	1.6 % (1)	6.3% (4)
Fluid overload	1.6% (1)	27% (17)	30.2% (19)	31.7% (20)	-	9.5% (6)
Anaphylaxis	17.7% (11)	16.1% (10)	14.5% (9)	3.2% (2)	1.6 % (1)	46.8% (29)
Sepsis	3.2% (2)	33.9% (21)	33.9% (21)	27.4% (17)	1.6 % (1)	-
Electrolyte disturbance	6.5% (4)	43.5% (27)	30.6% (19)	17.7% (11)	-	1.6% (1)

Please list the protocols/guidelines for acute care scenarios (if any) that you consult when managing acute situations.

Protocol/Scenario	**%; n**
Intern app	34.7%; 26
Oxford Handbook	21.3%; 16
Sepsis guidelines/bundles	18.7%; 14
GAPP Guidelines App	16%; 12
Sepsis 6	10.7%; 8
ACLS guidelines	10.7%; 8
British National Formulary	8%; 6
NICE guidelines	6.7%; 5
ST James' Intern Guide	6.7%; 5
Stroke pathway	4%; 3
British Thoracic guidelines	4%; 3
MD on call app	4%; 3
GUH guidelines	4%; 3
Hyperkalemia protocol	4%; 3
Diabetic Ketoacidosis guidelines	4%; 3
Google	4%; 3
Medication selection	2.7%; 2
Hospital Poster guidelines	2.7%; 2
Emergency Dept. guidelines	2.7%; 2
American heart association ACS	2.7%; 2
Antimicrobial app	2.7%; 2
Chest pain protocol	2.7%; 2
ECG review guidelines	2.7%; 2
Deteriorating/confused patient	2.7%; 2
Others mentioned by only one person.....	
GI Bleed	
Atrial Fibrillation Algorithm	
Up to date app	
Q pulse	
Hypertension	
WHO Pain Ladder	

Hospital Antibiotic Guidelines
Medscapes
Microapps
UHL app
Delirium protocol
Cork E Medicine
IV infusion guide
Shortness of breath
Mater Guidelines
Hypoglycaemia protocol
"Look at medical notes"
"Talk to med reg on call"
PHECIT (pre-hospital emergency care council guidelines)
Anticoagulation
National Institutes of Health Stroke Scale Guidelines
"EWS chart"
The BMJ
Persistent pain despite review
Dietician guidelines for EI (?) replacement
NA guidelines
K guidelines

If you use protocols/guidelines to manage acute situations, how do you access these?

Method of access	**%; n**
Mobile phone	57.3%; 43
Ward computer	13.3%; 10
Bring book with me	5.3%; 4
Paper copies in ward/on ward walls	5.3%; 4
On EWS sheet	2.7%; 2
Online	2.7%; 2
Ask staff	1.3%; 1
ACLS copies	1.3%; 1
Intern app	1.3%; 1

Please list five acute care scenarios for which you believe that protocols/guidelines are inaccessible or unavailable

10 most frequent acute care situations for which protocols/guidelines are inaccessible or unavailable

Situation/Issue	**Reported by: (n;%)**
Electrolyte Disturbances	18; 24%
Acute Confusion	16; 21.3%
Desaturating patient	8; 10.7%

Severe pain	7; 9.3%
Tachycardia	7; 9.3%
Diabetic ketoacidosis	7; 9.3%
Acute urinary retention	6; 8%
Agitation	6; 8%
Stroke	5; 6.7%
Respiratory distress	4; 5.3%
Hypertension	4; 5.3%
Hypotension	4; 5.3%
Epilepsy/Seizures	4; 5.3%
Atrial Fibrillation	4; 5.3%
Fall in Glasgow Coma Scale Score	4; 5.3%

Resilience Programme NDTP Report July 2016

Project summary

While there is an increasing interest in resilience among physicians (Zwack & Schweitzer, 2013), there is a lack of literature addressing the definition or conceptualisation of resilience, of instruments to assess resilience among physicians whose work context and responsibilities differ so greatly from other professional groups, and of empirically supported strategies for training or improving resilience among physicians. The aim of this project is to begin to fill in these gaps in the research literature and to set a foundation for effective resilience training and the promotion of resilience and wellbeing among Irish doctors. The project has three key aims:

1) To conduct a systematic review of the literature on resilience among medical professionals. This literature review will provide guidance on defining and understanding resilience, measuring resilience, and intervening to improve resilience.
2) To develop, pilot, and validate an instrument suitable for assessing resilience among medical professionals.
3) To evaluate the effects and feasibility of a small number of interventions to promote resilience among interns at GUH.

Financial Information

Grant amount awarded:
€59,000
Total Spend to-date:
• **Project Manager Personnel cost split across 6 projects. (Please refer to Financial Overview Sheet)
• Research Personnel €43,056.00

Progress to date

- The funding for this project was approved by NDTP. Upon update with the NDTP, the funds are due to reach the University research account end of August 2016.
- Interviews were held for research assistants in early June 2016.
- A research assistant has been hired to work on this project. This individual commenced work on August 3rd 2016.
- A systematic review protocol has been developed by the research team. The research assistant will commence work on this review.

Intern Post Quality Evaluation Programme NDTP Report July 2016

Project summary

The purpose of this project is to develop a protocol suitable for evaluating the educational/clinical learning and safety environment of intern training posts offered in the Republic of Ireland. This protocol will be applied to evaluate the intern training posts offered within the West Northwest Intern Training Network and its feasibility and utility will be assessed.

Financial Information

Grant amount awarded:
€46,556
Total Spend to-date:
• **Project Manager Personnel cost split across 6 projects. (Please refer to Financial Overview Sheet)
• Research Personnel €43,056.00

Progress to date

- The funding for this project was approved by NDTP. Upon update with the NDTP, the funds are due to reach the University research account end of August 2016.
- A research assistant has been hired to work on this project. This individual commenced work on August 3rd 2016.
- A review of the research literature has been conducted in order to identify self-report instruments suitable for evaluating the educational/clinical learning and safety environment of intern posts. Subscales from two validated instruments-

the Junior Doctor–Patient Safety Attitudes and Climate Questionnaire (from Durani, Dias, Singh, & Taub, 2013) and The Postgraduate Hospital Educational Environment Measure (PHEEM; from Roff, McAleer, & Skinner, 2009) have been selected.

- An interview schedule has been developed. Interviews will focus on eliciting details from interns on the learning potential within their post and how it is allowing them to develop key competencies.