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**MEDICAL TRAINING REVIEW PANEL**

**NATIONAL PRIORITY PROJECTS IN PREVOCATIONAL MEDICAL  
EDUCATION AND TRAINING**

**FINAL REPORT**

**“INTERN MODELLING TOOL”**

**REPORT SUBMITTED TO:**

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## EXECUTIVE SUMMARY

In an article in the Age on Oct 14th 2009 based on a study at Melbourne's Alfred Hospital it stated that February is the worst month to go to hospital because the influx of new trainee doctors causes the number of medical errors to rise by 40 per cent. In the same article the AMA Victoria's president Dr Harry Hemley said there were not enough resources devoted to junior doctor training.

"It's not just a matter of increasing the time allocated to training – we also need better support systems for junior doctors and greater staff flexibility," he said.

This study has come about as an attempt to deliver more effective training and development to interns by developing a tool to identify a model of an effective intern.

The intern modelling tool seeks to identify the cluster of factors that contribute to an individual transitioning successfully from medical student to competent doctor. The resultant tool could be used to identify at the beginning of an intern's rotation any potential "blocks" or weaknesses and focus on developing skills and competencies in those areas identified as gaps.

The identification and ability to address these gaps could result in a measurable decrease in errors and an acceleration of the time it takes to transition successfully from medical student to competent doctor.

In developing the tool consideration was given to the combination of:

1. Learning styles, thinking preferences and cognitive ability
2. Psychological factors such as stress and anxiety
3. Personality
4. Environmental factors

The tool will be piloted on interns beginning their rotation in 2010.

## **PURPOSE OF THIS PROJECT**

### **1. Problem Statement**

For over thirty years there have been multiple weekend seminars and workshops with Queensland Health and the University dealing with two main problems in the transition of the medical student to practising and fully registered Doctor.

The two main problems are as follows:

1. The inability of the new intern to “work” in the system. Queensland Health Medical Supers have complained frequently that some of these people are “unemployable” as they cannot function in the system and blame the University for training them poorly. The University responds that it is not their role to make them workers, just provide them with knowledge.
2. The number of interns who fail their basic rotations. Despite a complete change in the course style and content over this period there still remains a small cohort who is completely dysfunctional and unregistrable without extended supervision or training. The dysfunctional numbers are about the same irrespective of the type of University degree they have completed.

The justification for this project to provide a tool that accurately identifies the real issues that are resulting in the difficulty in transition from medical student to fully registered Doctor. The tool can identify the issues and properly address an individual’s development plans. This would ensure any gaps in non-medical skills and knowledge were identified and addressed at the earliest possible opportunity, therefore making the training pathway more efficient.

### **2. Project Objectives**

This research project proposed to develop a tool to enable some tangible evidence to support ways in which medical students who are going to have difficulty are identified earlier. This will enable appropriate professional and personal development programs to be initiated to accelerate the rate at which competency is achieved.

The Emergency Physicians at the Princess Alexandra Hospital have identified the following broad categories of possible reasons that may constitute this “Block”.

1. Lack of Intelligence – this hypothesis is all but excluded by the academic requirements for entry into tertiary education. (However, it may not cover all aspects of “Emotional Intelligence”.)
2. Lack of Knowledge – this hypothesis is all but excluded by a graduating mark from the medical school.
3. Drug, alcohol or psychiatric problem. These issues are being excluded from the entry criteria of our study.

4. Lack of “Problem Solving Skills”. This generic term is being used to cover areas including but not limited to multi-tasking, time management and common sense.

It appears that interns in the emergency environment are increasingly finding it difficult to sort through volumes of patients. Data indicates the “work speed” from year one to year three increases by about 400%. We do not believe this is due to knowledge content improvement but the acquisition of work skills and faster decision making powers. Four to six interns on a shift can basically be replaced by two SHO’s. It is apparent that if interns could accelerate the time it takes to become competent it would alleviate many of associated flow on effects.

This project aims to develop a tool that will assist in finding a way to identify what makes a successful intern. How do successful interns function and can this be modelled in order to fast track this process of gaining efficiency. Our research showed that it has not been studied before. The perspective of modelling the strategies of successful interns and contrasting this with the strategies of those who have great difficulty in making the transition from medical school to fully functioning doctor. If we had a tool to identify what combination of factors creates success we could accelerate the programs to develop those skills and competencies.

Once the specifics involved in Point 4, “Problem Solving Skills” (above) can be elucidated; a more scientifically based remedial programme can be designed, implemented and researched. A programme that addresses the specific problems may save these doctors much personal anguish and work stress. It could also dramatically improve the efficiency and productivity of what has become in recent times an expensive workforce.

### ***3. Strategies to achieve Project Objectives***

The proposed strategy underpinning this project has been to:

- Research what the tool needs to identify, i.e. what is it that results in an intern having difficulty with transition
- Research how to best administer such a measurement and get accurate results
- Identify what is different in the thinking between interns who transition well and those who don’t
- Develop a tool that is cost effective to deliver online

### ***4. Research method***

Our strategy will be to combine a number of methodologies to create a tool specific to the medical profession. We aim to develop and test a “Modelling Tool” for the identification of the thought processes and character traits that are the cause of a “Block” in “Intern Subjects” in contrast to the thought processes and character traits of the successful controls.

The “Modelling Tool” has been developed using a combination of –

- Scientifically based Neuro-linguistic Programming (NLP) techniques developed by Robert Dilts, Shelly Rose Charvet and other NLP experts to effectively determine the structure and process of thinking, in particular looking at meta-programs, values elicitation and timeline orientation.
- The Neethling Brain Instrument (NBI) which measures brain dominance and links closely to people’s ability to manage time and creatively resolve problems. We consulted with Kobus Neethling, a world leader in brain dominance. Kobus is interested in working with us further as we progress to validate and further research developing a tool specific to the medical profession.
- Martin Seligman’s 'Learned Optimism' survey is a validated tool that has been used in determining the impact of an optimistic vs pessimistic mindset on performance. We have included a number of questions to explore resilience in interns as it has potential to have impact on an intern’s progress.

**a) Formulation of the “Modelling Tool”**

This combination of instruments and theories has not been used before. As such, this combination will produce an extremely comprehensive assessment and provide a solid training needs analysis from which to build a training program. The training tool would be the basis of the planned follow up project.

**b) Use of a Pilot study**

A Pilot study will be established in order to:

- Model 10 senior ED staff and 10 Junior staff including four recent interns that have already been identified as “Subject Interns”
- Utilise this tool in blinded randomised controlled trial of all interns and residents working in their first rotation. The modelling tool will be used to assess and predict intern performance prior to the intern commencing the intern ED term or during the first week. The results will be compared to the mid-term and end-of term assessments which is the current gold standard for Intern Assessment (this is being conducted on a group ongoing in 2010)

## DELIVERY OF PROJECT OBJECTIVES

This section delivers an overview of the main objectives of the project

<b>Project Component</b>	<b>Deliverable</b>	<b>Status</b>
NEAF Approval	Documentation for informed consent	Done
Literature Review and initial research to determine possible contributing factors	Summary of research and list of factors to consider in tool	Done
Meet with Kobus Neethling in South Africa to consult on brain dominance and its impact	Develop plan for how to incorporate whole brain research into modelling tool	Done
Job Profiling	Develop questionnaires to determine the profile of an intern and job profile	Done
Questionnaires for interviewing	Questionnaire for the interns interviews and different questionnaire for registrars	Done
Interview and model 10 interns	Report on common themes	Done
Interview and model 10 registrars	Report on common themes	Done
Develop Intern Modelling Tool	Modelling Tool ready for online distribution and testing	Done
Pilot tool with new intern groups	Data summary of tool	In progress with new intern groups 2010

## NON DELIVERY OF PROJECT OBJECTIVES

After the completion of 30 interns and registrars profiles, we concluded that we had enough data to recognise the qualities that were necessary in order to develop the tool.



## INTERN MODELLING TOOL – RESEARCH AND BACKGROUND

### 1. Background to tool

In researching the many articles related to learning in a dynamic environment such as a hospital one of the key issues for interns relates to what is called “execution as learning”. This involves four steps and contributes to learning faster. It requires the organisation to adopt an approach of:

1. Provide process guidelines
2. Provide tools that enable employees to collaborate in real time
3. Collect process data
4. Institutionalise disciplined reflection

My observation over many hours of this project in the Emergency Department environment was that many interns were ineffective due to gaps in the approach outlined above. I observed many new interns appearing to spend inordinate amounts of time reading through histories and not seemingly able to make decisions about what to do next. I also observed interns complete procedures unsafely (eg attempting to insert an IV with practically no aseptic technique) with no apparent reflection following the procedure of how their lack of competency may have impacted the patient. A number of key behaviours became apparent that were then validated in the interviews with registrars detailed later in this report.

In learning to work in the complex environment that is a hospital it is also useful to research Peter Ducker’s work.

*Excerpt from Harvard Business Review July – August 2008*

#### **Managing Oneself – Peter Ducker**

- *How do you learn and work with others?*
- *What are your most deeply held values?*
- *In what type of work environment can you make the greatest contribution?*

*Ducker stresses the importance of managing ourselves which is what makes great achievers different. Most of us need to learn how to manage ourselves. It’s about knowing when to change gears in a career that could span 50 years. He recommends feedback analysis – whenever you make a key decision or take a key action, write down what you expect will happen. Nine or 12 months down the track compare the actual results with your expectations. Feedback analysis was invented sometime in the 14th century by an obscure German theologian and picked up quite independently by John Calvin and Ignatius of Loyola who incorporated it into the practice of their followers. The steadfast focus on performance and results that this habit produces is why the institutions these men founded dominated Europe within 30 years. Practiced consistently, this simple method will show you within a fairly short period of time, maybe two or three years where your strengths lie.*

*It will show you where you are strong and where you are lacking. It will highlight where you have no strengths and cannot perform.*

*Implications from feedback analysis:*

- 1. Focus on your strengths*
- 2. Work on improving your strengths*
- 3. Take time to acquire skills and knowledge you need to fully realise your strengths*

Discover the way you learn:

Ducker simplifies it to; are you a reader or a listener and then gives many examples of how his impacts on performance. Knowing how you learn helps you to act on that knowledge. A key point for interns would be to actively seek out to learn in the way that works best for them.

Ducker's work relates well to the difference observed between interns who appeared confident and competent verses those who stood in catatonic stances in the station glued to one page of a chart. The successful intern has the capacity to keep making decisions and learning even if the decision needs to be checked and verified. While poorly performing interns seem be unable to focus on only the relevant information in order to be able to make a decision. Due to being focused on the entire history they appeared to be overwhelmed and their decision making ability impeded.

These observations were factored into the research questions when considering how to discover which combination of factors is critical. The ability of the interns' to work on improving their strengths and being open to learning seem to support a better transition.

The other finding supported by Robert Kaplan's research is that those who choose medicine primarily because of family and social expectations are more likely to struggle in the transition.

*Excerpt from Harvard Business Review July – August 2008*

### **Reaching your potential – Managing yourself – Robert S Kaplan**

*Fulfilment doesn't come from clearing hurdles others set for you; it comes from clearing those you set for yourself." Kaplan's article looks at the importance of knowing yourself both your strengths and weaknesses. Once you have a grip on your strengths and weaknesses then the next challenge is clearly working out what you are passionate about.*

*Many people either don't know what their passions are or are so focused on the views of their peers that they drift into the wrong career ... Today, a number of doctors and lawyers are frustrated in their jobs and realize they might have based their career choices excessively on the views of their peers and popular opinion, instead of would they actually love the work." Kaplan also points out that if we are not passionate we don't have the same resilience to weather the tougher patches. He states it is important for success to understand what the key activities that contribute to that success are.*

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*Kaplan also warns about jumping on the bandwagon of conventional wisdom and to be self aware enough when injustices happen to step back and objectively assess your role in these events. He stresses that the mindset that allows us to learn from inevitable setbacks will also be the one that helps us bounce back.*

The research conducted through these interviews would support this strongly.

*Excerpt from Harvard Business Review February – March 2009*

**Why Good Leaders Make Bad Decisions** – Andrew Campbell, Jo Whitehead and Sydney Finkelstein

*The authors concluded that ... Leaders make decisions largely through unconscious processes that neuroscientists call pattern recognition and emotional tagging. These processes usually make for quick, effective decisions but they can be distorted by self-interest, emotional attachments, or misleading memories.*

In developing questions to determine what the “block” could be for interns in achieving competency we need to consider the interrelationships of many possible factors. One aspect to consider is their capacity to make timely and effective decisions. This was reinforced by conversations with numerous senior staff.

Studies by the authors, Campbell, Whitehead and Finkelstein of 83 decisions that they felt were flawed concluded that “flawed decisions start with errors in judgement made by influential individuals.”

In developing the intern modelling tool we are utilising theories of NLP, brain dominance and optimism and pessimism to examine problematic thinking and communication patterns in order to identify what blocks may occur to contribute to poor performance. Much of how we make a decision is outside of our consciousness; the tool could significantly contribute to bringing awareness to these problematic unconscious patterns.

In analysing what contributes to intern competence we need to consider what biases affect the judgements the interns form and any “misleading memories” or “distorting attachments”.

This research requires us to determine what questions, as part of the tool, will help identify these patterns and emotional tags. These will then be part of the ‘cluster’ of factors that can identify as contributing to poor performance.

#### **Example of assessment of criteria for communication.**

In the current Resident Medical Officer Assessment Form, the criteria is very broad and subject to differing interpretations. This includes the Supervisor discussing the goals and objectives at the start of the term and the RMO interpreting what they mean in relation to behaviour.

An example of criteria:

“Patient and Family – Interacts effectively and sensitively with patients and families/care givers.”

Every person will have their own set of values and beliefs around what “interacting effectively and sensitively” means. To ensure that people are clear on what this means it would be useful to have guidelines for the application of this criteria.

The question would be “what specific training do they have to understand the dynamics of effective communication?” There are lots of assumptions being made that are probably contributing to the interns “block”.

Considerations need to be given to being more specific in advance, with gathering the interns understanding of the expectation of what “interacting effectively and sensitively means”

- Do they fully understand the impact of tonality and physiology in communication
- Can they recognise people’s preferred methods of receiving communication
- Are they aware of people’s available “chunks of attention” ie not overloading someone experiencing strong emotional states
- Are they self aware in relation to their own thinking preferences and the need to adapt when communicating with someone who is very different

The lack of this basic knowledge and understanding could reasonably contribute to RMOs recognising at an unconscious level that they do not have rapport with a patient. Not having the skills and understanding to consciously know how to build back rapport, over a period of time this could significantly contribute to a loss of confidence in dealing with patients, families and carers.

This is compounding by negative self talk and judgement they create within themselves. If the intern focuses in on these undesirable outcomes without an awareness of how to shift that mental thought program they will get stuck and limit their own potential for success.

## MODELLING PROCESS OF SUCCESSFUL INTERN

To deliver the modelling tool the following steps are required to be completed

1. Identify the behaviours, skills and attitudes of a successful intern in the ED
2. Profile the success characteristics of an effective intern.
3. Conduct behavioural Modelling which is a model-based training process for capturing, replicating and transferring the expertise, ability or skill of successful interns to then enable development of relevant professional development activities.

## THE INTERN MODELLING TOOL

This does not need to be a fully validated psychological tool at this stage. This tool is to see if consistent relevant data can be obtained that can be validated by the results of competency at the end of their rotation.

## GOING FORWARD

The project has demonstrated that in looking for a predictor of what the 'block' may be in successfully transitioning from medical student to competent doctor there are many variants and that piloting the tool further is necessary. The tool will be piloted with interns in both Melbourne and Brisbane commencing in 2010 (minimum of 30) and will help to gather more data to verify our theories of what the potential 'block' could be caused by and the major contributing factors to effectiveness.

The interviews and data collected so far show that it is more likely to be a cluster of circumstances related to decision making ability, organisation, emotional intelligence and communication ability. Piloting the tool on a larger data sample will allow us to further validate which aspects are most significant in gaining competence.

## APPENDIX 1 – THE INTER MODELLING TOOL

### *Intern Modelling Tool*

#### Whole Brain Profile of a medical intern

<p><b><u>Left Cerebral Dominance</u></b></p> <ul style="list-style-type: none"> <li>• Collect the right information and facts in a patient history</li> <li>• Ability to judge what is important vs not</li> <li>• Accurate analysis ability</li> <li>• Effective Problem Solver</li> <li>• Think fast and logically</li> <li>• Effective decision making ability</li> </ul>	<p><b><u>Right Cerebral Dominance</u></b></p> <ul style="list-style-type: none"> <li>• Flexible and Adaptable</li> <li>• Initiative</li> <li>• Vision for own career</li> <li>• Sythesizing all the information to make a differential diagnosis</li> <li>• Clear vision /direction when taking a history</li> <li>• Ability to communicate the big picture to others</li> </ul>
<p><b><u>Left Limbic Dominance</u></b></p> <ul style="list-style-type: none"> <li>• Organisation</li> <li>• Time Management</li> <li>• Following procedure</li> <li>• Task oriented</li> <li>• Attention to detail</li> <li>• Punctuality and diligence</li> <li>• Have a system</li> </ul>	<p><b><u>Right Limbic Dominance</u></b></p> <ul style="list-style-type: none"> <li>• Intuitive</li> <li>• Good at reading non verbal cues</li> <li>• High level communication skills both verbal and non verbal</li> <li>• Listens actively and empathetically</li> <li>• Patient oriented</li> <li>• Good interpersonal skills</li> </ul>

## Intern Modelling Tool

**Name**

**Educational Achievements**

**Brief explanation of why you became a doctor**

**Questions**

Read the following key descriptors and select eight (8) that best describe your strengths.

Place the number two (2) next to these eight (8) descriptors.

Then select one of the eight (8) which is your greatest strength and change that number to a one (1).

Quality	Score	Quality	Score	Quality	Score
Ability to collect the right facts and information in a patient history		Vision for own career		Ability to synthesize all the information to make a differential diagnosis	
Intuitive		Time Management		Good at reading non verbal cues in others	
Strong analysis skills		High level communication skills both verbal and non verbal		Task orientated	
Listens actively and empathetically		Punctual		Think fast	
Ability to judge what is important vs not		Good interpersonal skills		Logical	
Effective Decision making ability		Patient focused		Work with a system	
Detail oriented		Effective Problem Solver		Diligent	
Flexible		Adaptable		Strong initiative	
Clear vision/direction when taking a history		Able to communicate the big picture clearly to others		Organised	
Procedural					

## Thinking preferences

Question	Strongly Agree	Agree	In Between	Disagree	Strongly Disagree
A step by step approach is best when taking a patient history					
It is important to have rapport with a patient to get a good history					
Positive interactions with other staff members result in better patient outcomes					
There is no such thing as failure – everything is feedback					
My emotional state will impact on the patients and those around me					
It is important to give a differential diagnosis once you have taken a history even if it is wrong					
It is more important to observe another person's physiology than listen to what they are saying					
Reading emotional cues are a key to a successful patient history					
It is important to be skilled in not letting the patient take you off track					
Patients often don't realise how important it is for an intern to stay on task					
Once you lose rapport with another person it is difficult to re-establish					
It is natural for patients to trust their doctor					
The ratio of talking by the intern vs listening should be 50/50					
Asking for help should be a last resort					
You only learn by making mistakes					
It is better to consult peers before you present to the registrar to ensure you are on the right track					
Managing your own disruptive emotions is an important part of being a good doctor					
Staying composed is essential at all times					
Being positive has a large impact on patients					
Taking personal responsibility for mistakes is part of the role					
I easily forget my mistakes and failings					
Success means taking calculated risks					
Setting goals is a key to success as an intern					
My new ideas are valued as an intern					
It is best not to demonstrate when you are unsure or don't know something to senior staff					
Sourcing information is more important than remembering information					
Improvement of patient care is an ongoing process					
It is important to challenge the status quo					
I tend to trust my first impressions and gut feeling more than the detailed analysis					
Procedures should be strictly enforced and followed					
It is important to have clear guidelines to follow					





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I prefer less details and to work things out myself					
We need to trust our gut instinct when working with others.					
I get most of my best ideas when I am reflecting on things					

### **Communication**

My preference for receiving information is

- a) Reading
- b) Listening to instructions

To best learn my preference is:

- c) Seeing the information
- d) Hearing a lecture or talk
- e) Doing the activity

## **APPENDIX 2 – INTERN MODELLING TOOL – INITIAL QUESTIONS**

### ***1. Pilot questions for initial rounds of interviews with interns***

1. What made you choose medicine as a profession?
2. What do you think are the most important aspects of the role? (do we need as an intern here)
3. What do you value most about being a doctor?
4. What type of contribution do you make as an intern? (Ducker says knowledge workers should be asking themselves what I should contribute.)
5. Can you identify 3 or 4 of the most important activities that lead to success in your job?
6. What are the greatest challenges that face an intern in A & E?
7. What helps you learn in an environment where you are hands on?
8. How comfortable do you feel asking for help?
9. How willingly would you admit an error?
10. Do you believe it is safe to say what is on your mind?
11. Would you say being a doctor is:
  - a) who you are
  - b) serving your purpose in life
  - c) what you do but doesn't define you
12. What would help you learn?
13. Do you learn by reading or listening?
14. Do you like a structured or unstructured workplace?

### ***2. Pilot questions for initial rounds of interviews with registrars***

1. What are the biggest challenges you faced learning as an intern?
2. What do you think interns need to do to reach their full potential?
3. Do you think this is a culture that allows people to admit mistakes?
4. Do you believe it is safe to say what is on your mind?
5. Do you think the senior staff has enough training in teaching and questioning others?
6. Does the successful intern view every patient as an opportunity for learning?

## APPENDIX 3 – FINDINGS OF MODELING INTERVIEWS

Formal interviews were conducted with 17 senior doctors and 11 interns and observation and informal enquiries conducted with over 200 hospital staff in the process of training them throughout 2009 about what they considered could result in poor intern performance which resulted in a number of internal and external factors being identified.

A summary of the majority of the interviews is below.

Date and Position and question posed	Response
8/9/08 Senior Registrar  What do you think contributes to a competent intern?	Registrar notices that many interns when asked to rate themselves rate themselves down. Her perception was that initially interns think that they need to know it all straight from medical school.  What is missing initially is an ability to filter what's important. Just because you have a degree doesn't mean that you are a doctor and there is a stressful transition in the process of being able to put it all together and demonstrate strong listening skills  Once they realise they don't need to know everything things improve. If basic knowledge and common sense are lacking that contributes to poor performance. Lack of instinct, confidence and poor self esteem.
What other factors influence it?	PA has a reputation for a high standard so potentially people don't want to show if they are not coping. Not part of the culture and it is hard to ask for help or show you are not coping.
Is it a safe place to admit mistakes	Leadership in A&E means it is a safe culture. Consultants are cohesive therefore more receptive to someone singing out for help.

Intern 1 RBWH What has been your rotation	Spinal/Brain/Medical/ED – Enjoyed maths and physics at school
What do you think are the most important things to learn?	Prioritising is a key one Working out how not to make mistakes Lots of stuff is intuitive and the main thing in first year is to make sure you are safe
What are you here to contribute?	Lots of paperwork/canulas Lots of sloughing off to interns what registrars don't want to do Saving time by getting history and doing examination – this uses up a lot of time for interns but then they waste 2 hours tracking down a senior person
What helps you learn?	To learn 1 aspect of every patient Senior Registrars give you pieces of information and then it's applying the understanding.
What are the greatest challenges?	Chaotic rotation Not knowing how to approach something –don't mind chaos but don't like the lack of access to people to ask. Frustration comes from not being able to find nurses Lack of interaction
What do you value most about being a Dr?	Patient communication – finding out what's happening and communicating what is happening – take the lead responsibility in that
What is your greatest	Taking up the slack (as far as the hospital is concerned) and getting the work done.

contribution as an intern?	For patients – trying to help them as much as possible
Most important that leads to success in your job?	Keeping a sense of humor. Hard thing becoming a dr was all previous skills were inapplicable. Had to work out what to worry about and what not to. It can make you in feel overwhelmed and not liking it doesn't help. There is limited control in what you can do so not to have big goals – little increments.
3 Biggest challenges as an intern?	<ol style="list-style-type: none"> <li>1. Finding boundaries and expectations – getting clear what they want and always the fear you are doing the opposite</li> <li>2. Finding out how to get on with registrars – not clearly defined boundaries</li> <li>3. Set yourself little goals so as not to feel overwhelmed</li> </ol>

09/09/08 Consultant	
What are your greatest challenges as an intern?	Rarely lack of knowledge – the interaction with registrars and the importance of just asking.
What stops people asking?	Because you are getting paid to make an assessment and to interpret it is easy to interpret that as I am getting paid to come to the complete conclusion and that is actually not what is expected. It's all about the assessment and it's OK to say I don't know.
What would be different if you could change something about clinical training?	Work smoother Stop at a defined time and tell what you did and didn't know – time and pressure means that doesn't happen Intern would come and report?

10/09/08 Intern 3	
How do you know you have done a good job?	Internal reference first – you have achieved what you set out to External next – Patient feedback and pats on the back
How safe psychologically do you think ED is?	Feel safe to ask for help or admit an error
What would make it easier for you to learn?	Registrars not being so busy and having more free time to teach however in saying that DEM is really good for learning.
What would help you learn?	Specific clinical feedback – Clinical coaching like in 4th year.

10/09/08 Intern 4	Rotation of Medical / Orthopedic/Obs and Gyn and the DEM Previously was an OT and would have started Medicine if T ER score was high enough
What do you value about being a doctor?	Can make a big difference Health Always wanted to be a doctor from when I was a child More challenging and rewarding – get to use your brain
What is your contribution as an intern?	Doing the crappy jobs the Drs don't want to do On the wards it is keeping a close eye on patients – reviewing and alerting Senior Drs to be aware. The intern knows the patient and has the time to do a good medical history. Doing the simple jobs, practical basic procedures. In A&E you get to do more complex procedures

What are the challenges in being an intern?	Job has a strict hierarchy – if the consultant wants it they get it (move away metaprogram in discussion) Documentation – having to do discharge summaries, fill out forms and referrals
What are 3 or 4 things that make successful interns?	<ol style="list-style-type: none"> <li>1. Good communicator – empathising with OS Staff</li> <li>2. Maturity – having other life experience and how they have dealt with other difficult situations before</li> <li>3. Problem Solving ability – an ability to deal with conflict when people are going off at you - Dealing with lots of different situations</li> <li>4. Confidence – knowing your abilities and then knowing when to ask for help.</li> </ol>
Challenges to your learning?	Having too much paperwork – discharge summaries that take up all the time which takes away from time for clinical skills. Spending too much time chasing consultants Surgery – lack of supervision and lots of learning from peers
How safe psychologically do you think ED is?	Would not hesitate to report an error – stern consultants would be intimidating but would still report it
What would help you learn?	Registrars replying immediately Getting to do all the treatment

10/09/08 Intern 5	Rotation was Geriatrics,Urology,Paeds Orthopaedics and ED
What do you think are the important aspects of the role?	<ol style="list-style-type: none"> <li>1. Prioritising</li> <li>2. Thinking quickly and logically</li> <li>3. Getting to spend time with patients and educate them – working out how much time to spend with people.</li> <li>4. Communication – 321 rule</li> <li>5. Quizzing registrars as normally there is not a lot of time to debrief after a case so keep asking as much as possible and why</li> </ol>
What are the greatest challenges in ED?	Work/life balance with shift work Lack of knowledge and experience
What would help you learn?	Formal education around clinical. Intern training 2 days a week.

10/09/08 Intern 6	Rotation has been Mental Health,Obs and Gyn,Medical and DEM
What made you decide to be a doctor?	Patient contact – previously worked in a lab, was bored and couldn't see myself doing it for the rest of my life whilst with this I can. There is too much paperwork but you do have to think for yourself and it is challenging and I feel stimulated
What is your contribution as a doctor	Doing the ground work Gathering all the information and trying to put it together. Main purpose is to gather it all and present it to someone superior.
What are 3 or 4 things that make successful interns?	<ol style="list-style-type: none"> <li>1. Good thorough history/examination – that is success from my point of view and initiating some form of treatment to make them feel better.</li> <li>2. Communicating to senior doctors the global picture of what is going on – doing it effectively and succinctly.</li> </ol>
What are the challenges?	It is a big jump from medical school to the DEM. Working out what your role is in the team setting What you have to do and are responsible for.
What helps you learn?	Learning by doing – by making mistakes and working it out.
How safe psychologically do you	7-8/10 – Happy to ask for help and admit a mistake

think ED is?	
Other points	Likes structure and is highly visual

10/09/08 Intern 7	Rotation of General Medical, GP, Anaesthetics
Why did you become a doctor?	Not a lot of choice out there – good for job security. Probably her mums influence as a nurse meant that she had a familiarity with health. Her other choice was architecture or engineering but chose medicine because you have lots of autonomy, can work in lots of different countries and has variety
What are 3 or 4 things that make successful interns?	1.Organisational skills –being able to priorities well 2. Being motivated
What are some challenges as an intern?	Getting used to the environment and the responsibility of working for pay unlike as a student and the workload is much greater than as a student
What helps you learn?	Doing – repeating something over and over Knowing who to ask and what to ask, as well as finding the right opportunity to ask Having something already in place, systems If something is at the level of canulation she will try again but if it is out of her depth she will ask

10/09/08 Intern 8	Rotation of Psych, Paeds Emerg,Gen Med and then ED
Why did you become a doctor?	Process of elimination – didn't enjoy engineering and went in to medicine thinking I would do Psychiatry but it was very frustrating.
What is your contribution as an intern?	As an intern you are a dog's body – told what to do but it's about spending time with patients and developing relationships. They look to you and it's about making people feel better.
What do you value as a doctor?	Rewarding Great communication (having been on the other side of the fence) Good clinical victories Making a difference
What are the challenges of being an intern?	The senior staff don't have time for feedback
What would help you learn?	Specific feedback about what you do.
What are 3 or 4 things that make successful interns?	1. Good knowledge base 2. Enthusiasm 3. Good interpersonal skills
What have been your greatest challenges as an intern?	Performing indepently (terrifying) Taking full ownership and making the jump to being the one who is responsible Treating patients I don't like Never good at being yelled at.

10/09/08 Intern 9	Rotation Gen Med, Anaesthetics,Gen Surg and DEM Very procedural and task orientated
Why did you become a doctor?	Very procedural and task orientated – Loves anatomy and physiology –Did a science degree at UQ (has very upright and direct physiology)
What do you think is the role of an intern?	Efficiency Being organised Attention to detail

What are some challenges about being an intern?	Interns are not so much involved in making the clinical decisions but up to you to be on top of results. Consultants expect efficiency Work/life balance Knowing when to call for help and when you are out of your depth
What do you value about being a doctor?	Has a passion for anaesthetics because it is physiology and procedural meshed together? Chance to talk to people from all walks of life Challenging Reminded every day how little you know and how much more there is out there Chance to help people
What helps you learn?	Being given reassurance when fine and being told the answers when not.
What is your main contribution as an intern?	Working through the masses of information and being able to present a concise summary. On the wards your 'Clerical' role – being organised and efficient
What are 3 or 4 things that make successful interns?	<ol style="list-style-type: none"> <li>1. Organised</li> <li>2. Calling for help</li> <li>3. Being a nice normal DTE person</li> </ol>
What are the greatest challenges as an intern?	Getting everything organised and not being overwhelmed Not being afraid to ask for help Lack of procedural experience

10/09/08 Intern 10	Rotation of Obs and Gyn, Ortho, Gen Med and ED (very shy and introverted initially in interview)
Why did you become a doctor?	Pride – I wanted to do something I could be proud of – I liked people and wanted something with a set path. It has structure and is interesting. I liked science at school and decided at 16 years
What are 3-4 important aspects of being an effective intern?	<ol style="list-style-type: none"> <li>1. Taking a good history – doing a good examination</li> <li>2. Knowing when to ask for help</li> <li>3. After being told what to do to make things happen</li> </ol>
How safe psychologically do you think ED is?	Feel comfortable asking for help
What do you think your major contribution is as an intern?	Doing the leg work and then others do the thinking Contribute to patient experience by explaining what is going on and why.
What are the key aspects that contribute to success as an intern?	<ul style="list-style-type: none"> <li>• Work hard – be thorough and make sure everything is done.</li> <li>• Making sure nothing is missed – being thorough</li> <li>• Try to get along with everyone – nurses, senior doctors, ward clerks</li> <li>• Just be nice to everyone and help if people need it</li> <li>• Patient advocate – what is best for the patient and what they need</li> </ul>
The greatest challenge of being an intern?	Hard to get on with everyone when you are busy and when everyone is asking you things staying nice and happy. I worry (physiology looking down and very worried about being nice to everyone) It is hard to work fast – being slow and thorough Hard to be nice to everyone and be an advocate – easy to do a dodgy referral
Metaprograms How do you know when you have done a good job?	Internal – I feel good when things get sorted. Feel good when I have a clear plan and outcome for patient External Reference-When patient is happy
What helps you learn?	Most important is doing and then reflection – get an idea of what's going on before you get help.

	Helps to look at it later MOLE (Appeared introverted and nervous – holding neck and very kinaesthetic)
How safe psychologically do you think ED is?	I feel very comfortable asking for help Reasonably comfortable admitting a mistake
What would make it easier to learn?	If I had done it all before Greater access to registrars

10/09/08 Intern 11	Rotation of Gen surg, Psych, Ortho
Why did you become a doctor?	It is what I was most interested in and I always wanted to be a dermatologist. I like the surgical options
What do you think are the most important aspects of being an intern	Doing most of the communication with the patients Making sure everything is done and they have everything they need
What are 3-4 important aspects of being an effective intern?	<ol style="list-style-type: none"> <li>1. Communicating with the patient</li> <li>2. Being positive</li> <li>3. Asking patients is there anything worrying them</li> </ol>
What do you value about being a doctor	<ul style="list-style-type: none"> <li>• Interacting with the patients</li> <li>• The feeling of discharging someone and knowing that you have helped</li> <li>• It's very rewarding</li> </ul>
What do you think is your greatest contribution as an intern?	You feel like you do all the jobs no-one else wants to do – the paperwork, the stuff that the rest of the team doesn't want to do. You also have the opportunity to pick up stuff that consultants or registrars may not see.
What else is important as an intern?	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Confidence – speaking up if necessary</li> <li>• Good knowledge base and practical skills</li> </ul>
What are your greatest challenges as an intern?	<ul style="list-style-type: none"> <li>• Making the practical shift from being a medical student to being hands on</li> <li>• Understanding how medicine works in reality vs text books</li> <li>• Workload can be a bit overbearing (but you expect that)</li> </ul>
What helps you learn?	Repetition – seeing a number of the same kinds of cases MOLIE has been great – having that designated teaching time
How safe psychologically do you think ED is?	I would always say what is on my mind – most people are approachable.

10/09/08 Intern 12	Rotation General Surgical, Psychiatry, Paeds Emerg and ED
Why did you become a doctor?	I was either going to be a Diplomatic or a Doctor
What do you value about being a doctor?	<ol style="list-style-type: none"> <li>1. People</li> <li>2. The interaction – such a privileged position</li> <li>3. Personal satisfaction – it is challenging emotionally and I thrive on that</li> </ol>
What are 3-4 important aspects of being an effective intern?	<ol style="list-style-type: none"> <li>1. Organisation</li> <li>2. Self preservation (especially during general surgery)</li> <li>3. Communication</li> <li>4. General knowledge is down the list but important</li> </ol>



What do you think is your greatest contribution as an intern?	The behind the scenes stuff which is the stuff that I am best at Doing all the background organisation
What are your greatest challenges as an intern?	Combination of things – the completely new environment where there is little introduction. Non supportive environments like Psych
What helps you learn?	<ul style="list-style-type: none"> <li>• Willing senior staff to answer questions and give you their time</li> <li>• Feeling supported</li> <li>• Knowing you are trusted</li> <li>• Patients are the appeal and the challenge</li> </ul>
How do you learn?	Learn by doing

10/09/08 Intern 13	Rotation of General Surgical/Ortho and ENT
Why did you become a doctor?	I started as a dentist because I liked using my hands but it was too confining – I most interested in the head and neck
What do you value about being a doctor?	<ul style="list-style-type: none"> <li>• Being hands on</li> <li>• Having a clear problem that can be fixed</li> <li>• Technical challenges and meeting those</li> <li>• Tangible and interesting</li> </ul>
What are 3-4 important aspects of being an effective intern?	<ol style="list-style-type: none"> <li>1. Organisation (most important)</li> <li>2. Prioritising and Triaging</li> <li>3. Punctuality and diligence</li> </ol>
What do you think is your greatest contribution as an intern?	There are 2 sides to it – you are the glue that connects the patients to the hierarchical decision making Filling in forms Would like more responsibility
What are your greatest challenges as an intern?	Ward call when the apron strings are cut – being the first person to see the patient
What helps you learn?	Being interested and motivated Scenarios to conceptualise Assist (see and then do under supervision)
How safe psychologically do you think ED is?	DEM people are always willing to help - would always admit an error
What helps you learn?	Structure Doing more – having your own private tutor

04/02/09 Registrar	
What do you think are some potential causes for difficulty in the transition from medical school to intern?	Drug and alcohol issues Attitude Lack of insight Not enough mentoring in medicine

2/06/09 Registrar	
What do you think are some potential causes for difficulty in the transition from medical school to intern?	One of the big issues is the role they see for themselves – successfully making the shift from the student to being the doctor
What are the characteristics of a good intern	Someone who takes a history with direction
What are some typical issues or characteristics of a “blocked” intern?	Classic indicator is the intern that gathers all the information with no idea how it all connects (links to a later interview about being obsessive – gathering too much information)
What other observations have you made of “blocked” interns?	Individuals work slowly Others frustrated by them They are people who have failed to make the next step in life in other areas – gave the metaphor of the Matthew McConachy film when he is 40 and hasn’t left home
Anything else?	Lack of self awareness or fear

02/06/09 Consultant	
What are the key qualities of a good intern?	Self Understanding – need to have enough awareness that they are junior and don’t have to have all the answers. Must be willing to accept guidance Very best have advanced independent thinking strategies – An example of that is being willing to admit they may not be right. Coming to a conclusion around a diagnosis and treatment but willing to move on that if others have other opinions. Logical Common sense Ability to apply what they know even to something they haven’t seen before Keen to learn Keen to impress – take pride in what they do Keen to work hard
What do they value highly?	Getting the job done Pride in what they do
What do you think results in an intern struggling?	The reasons they don’t cope at work could be multiple – They don’t take ownership Physiologically – tend to be quiet introspective and not able to create a logical plan of how things work in their mind. Possibly also self esteem – very worried about the opinion of others An internal reference that is wrong – ie they decide based on their own reality but it is a distortion Scared of communication – of saying the wrong thing
What stresses interns most in the ED?	The first time they have to independently assess a patient and the reality of now “being” the doctor Judging themselves – am I doing a good or bad job Shift pressure – under stress personalities come out High level of supervision – perceived performance assessment
What are some of the common errors?	Errors in judgment Most involve not asking for help when they need it Expect them to be sensible not necessarily brilliant and we want them to be safe

<p>Director of ED 02/06/09 What makes a successful intern?</p>	<p>Time Management Decision Making Having a system Listening Less obsessive – poor interns take a long history in an area that is irrelevant and the last question they ask is “what is wrong?” Self reliance Autonomy</p>
<p>What values do you think are important for a successful intern?</p>	<p>Motivation Honesty Integrity Compassion Career definition – clear on where they are going</p>
<p>What do you think causes an intern to struggle in the transition?</p>	<p>Missing the point – just can’t process information and create the links Combination of arrogance and ignorance Too obsessive – get paralysed with the chart</p>
<p>Consultant 02/06/09 What are the characteristics of a successful intern</p>	<p>Ability to priorities Motivated Show initiative Ability to think outside the square – if they don’t know the answer the keep looking to find it Good time management Insight – the ability to predict – instinct built in Confidence – being confident in terms of own self esteem Good people skills Referrals and rapport – treat nurses better – they are cooperative with other related staff Communication skills particularly non verbal – good insight into non verbal cues Have clear direction of where they are going – those who don’t know where they are going in life just float. Use direct assertive language – their non verbal and verbal communication are good</p>
<p>What results in poor intern performance?</p>	<p>Don’t address the real needs of the patient Don’t have the insight Often quiet, shy and timid, very softly spoken Lack of confidence that looks like incompetence Don’t make eye contact Body language is more withdrawn Lack of self esteem</p>

Registrar 02/06/09 What characteristics make a good intern	<ul style="list-style-type: none"> <li>Knowledge base – technically sound</li> <li>Time management</li> <li>Communication skills</li> <li>Eagerness to learn – keen to learn, do and be involved</li> <li>Assume honesty</li> </ul>
What results in poor performance?	<ul style="list-style-type: none"> <li>Dishonest</li> <li>Slow , hard to get information from and hard to interpret the information they do give</li> <li>Rarely make decisions and when they do they are poor decisions</li> <li>Lacking in confidence</li> </ul>
Senior Registrar 02/06/09 What are some of the common errors of judgment that a poor intern makes?	<ul style="list-style-type: none"> <li>Thinking they know something when they don't eg a drug dosage without looking it up</li> <li>Doing too much before they ask and thinking they are allowed to</li> <li>Arrogance – not the common factor but thinking they are better than they are</li> <li>Lack of knowledge that they shouldn't do something</li> </ul>
What makes an exceptional intern?	<ul style="list-style-type: none"> <li>Mature age students – gave the example of an OT so on rounds was already familiar with hospital context</li> <li>Patience</li> <li>Good judgment</li> <li>Component of gut feeling – knowing when to act on a gut feel</li> <li>Time management</li> <li>Prioritising</li> </ul>
Registrar 13/07/09 What are the characteristics of a good intern?	<ul style="list-style-type: none"> <li>Work ethic – work hard</li> <li>Work well as part of a team</li> <li>Good interpersonal skills – good with dealing with difficult people (sick/frightened)</li> <li>Good listener (synthesize what people are saying)</li> <li>Pleasant</li> <li>Good with interaction – able to convey information in a way that means they are easily understood</li> <li>Level headed and calm</li> <li>Deal with a number of things at once</li> <li>Ability to multi-task</li> <li>University is not that hard and the realisation that in the real world it is hard work</li> </ul>
What do think are the characteristics of a poor intern?	<ul style="list-style-type: none"> <li>Poor interpersonal skills</li> <li>Don't listen</li> <li>Fixed way of thinking</li> <li>Rude and abrupt with people</li> <li>Cant convey what they are thinking in an understandable way</li> </ul>

<p>Director of ED 13/07/09 What are the characteristics of a good intern?</p>	<p>Fundamental characteristics are their ability to question a patient and have listened to the patient – That is take a history and have explored the relevant information Good verbal and non verbal skills – ability to notice if you get an unusual response and explore that – those that struggle tend to be stuck in thinking – I do this and then this rather than explore what is really happening. They haven't really heard the patient Ability to interact with the patient that is tailored to the patient Don't use a checklist approach – they are adapting to the information as they receive it Ability to synthesize a differential diagnosis Intelligent, capable and high achievers Ability to communicate and listen Communication is key Optimism is critical in ED</p>
<p>Why did you choose medicine</p>	<p>Wanted to do something to sustain my interest in lifelong learning Keep me intellectually challenged Something for the greater good Like helping others</p>
<p>What makes a poor intern?</p>	<p>You need to be aware that most of the dangerous doctors make assumptions that are flawed. They get overly confident because they have seen something once and don't actively seek feedback</p>
<p>Registrar 13/07/09 What are the characteristics of a good intern?</p>	<p>Humility – treat patients as real people Taking a history and being able to think about the patient Thinking of how to make the leap between symptoms and the initial diagnosis. An intern who does well is prepared to come and say I saw a patient and I think it could be a, b or c. Flexible enough to realise that something may present in a certain way but be something else. Open mind – malleable approach and can adapt themselves Prepared to come and ask Works well with the whole team ie listens to the nurses Intuitive ability develops with experience Is willing to say "I don't know"</p>
<p>What is characteristic of a poor intern?</p>	<p>Balance between being too confident and not asking and the opposite extreme of not coping so don't ask</p>
<p>Registrar 13/07/09 What are the characteristics of a good intern?</p>	<p>Take a good and comprehensive history and conduct a focused examination – can come to you with a good list of differentials and a plan as to how they will approach treatment. Confident Comes up promptly after seeing patient – focused on job</p>
<p>What is characteristic of a poor intern?</p>	<p>Too many gaps in the story Manner of communication – they have no idea – haven't thought about it Algorithms for examinations When telling you the story you are already having to ask questions</p>

## APPENDIX 4 – TOOLS AND RESULTS

Intern Modelling Project Invitation

Consent form for Intern Modelling Project

Intern Modelling Tool Participant Information Sheet

Questions for Interns

Questions for Registrars

## APPENDIX 5 – REFERENCES MATERIALS

Age Article October 14th 2009 “February “worst month to go to hospital” study

Harvard Business Review July-August 2008 – Honing your competitive edge

*Article 1* – page 18

Leaders in Denial – Richard S Tedlow

*Article 2*

Reaching your potential – Managing yourself – Robert S Kaplan

Peter Ducker – Managing oneself Harvard Business Review -