Centre for Medical Officer Recruitment and Education

Neurodiversity: What can pharmacists learn from medical education?

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Metro North Health's vision
Creating healthier futures together—where innovation and research meets compassionate care and community voices shape our services.

Metro North Health | Queensland Government

The Royal Brisbane and Women's Hospital and Metro North Health acknowledges the Turrbal and Yagara Traditional Custodians of the land upon which we live, work and walk, and pay our respects to Elders past and present.

Metro North Health | Queensland Government

I have no relevant conflicts of interest

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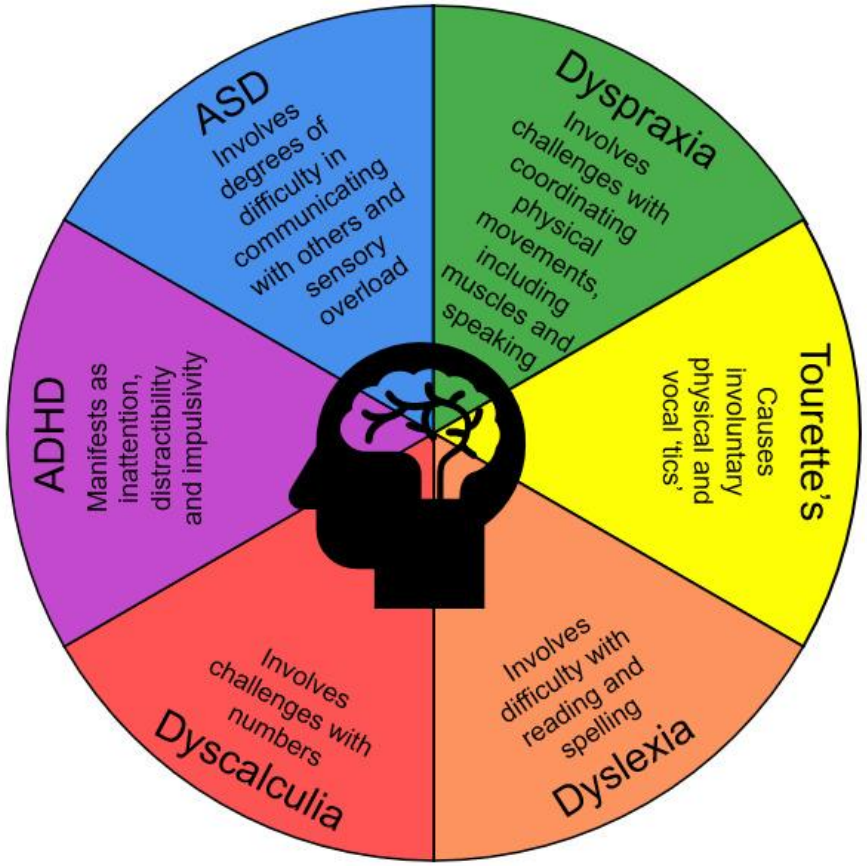
What is Neurodiversity?

Neurodiversity describes the variations in how people think, learn, process information, and experience the world.

These are diversities **NOT** deficits



Situation

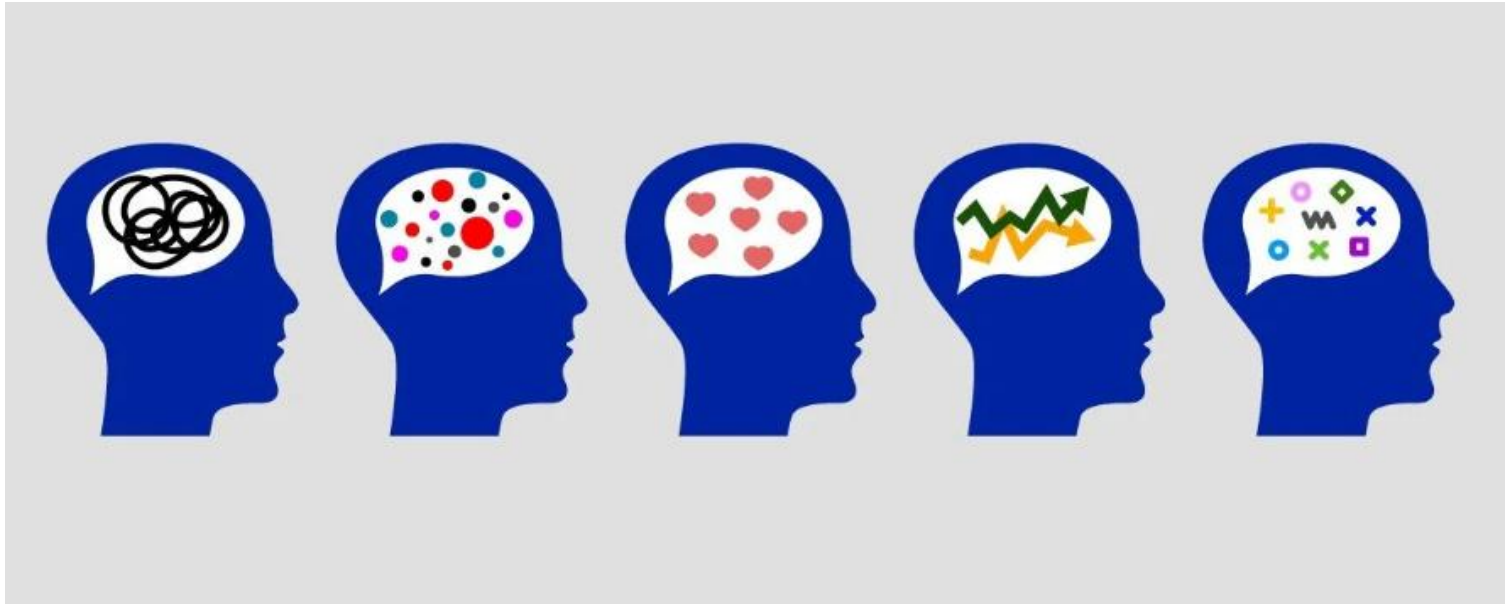
Increase in prevalence

15-22% of World's Population

~ 11% Australian Workplace

17.5% RBWH staff

Medical Workforce Data



Aim

To compare survey-based to interview-based approaches to identify neurodiversity in intern doctors.

To explore transferability to pharmacy

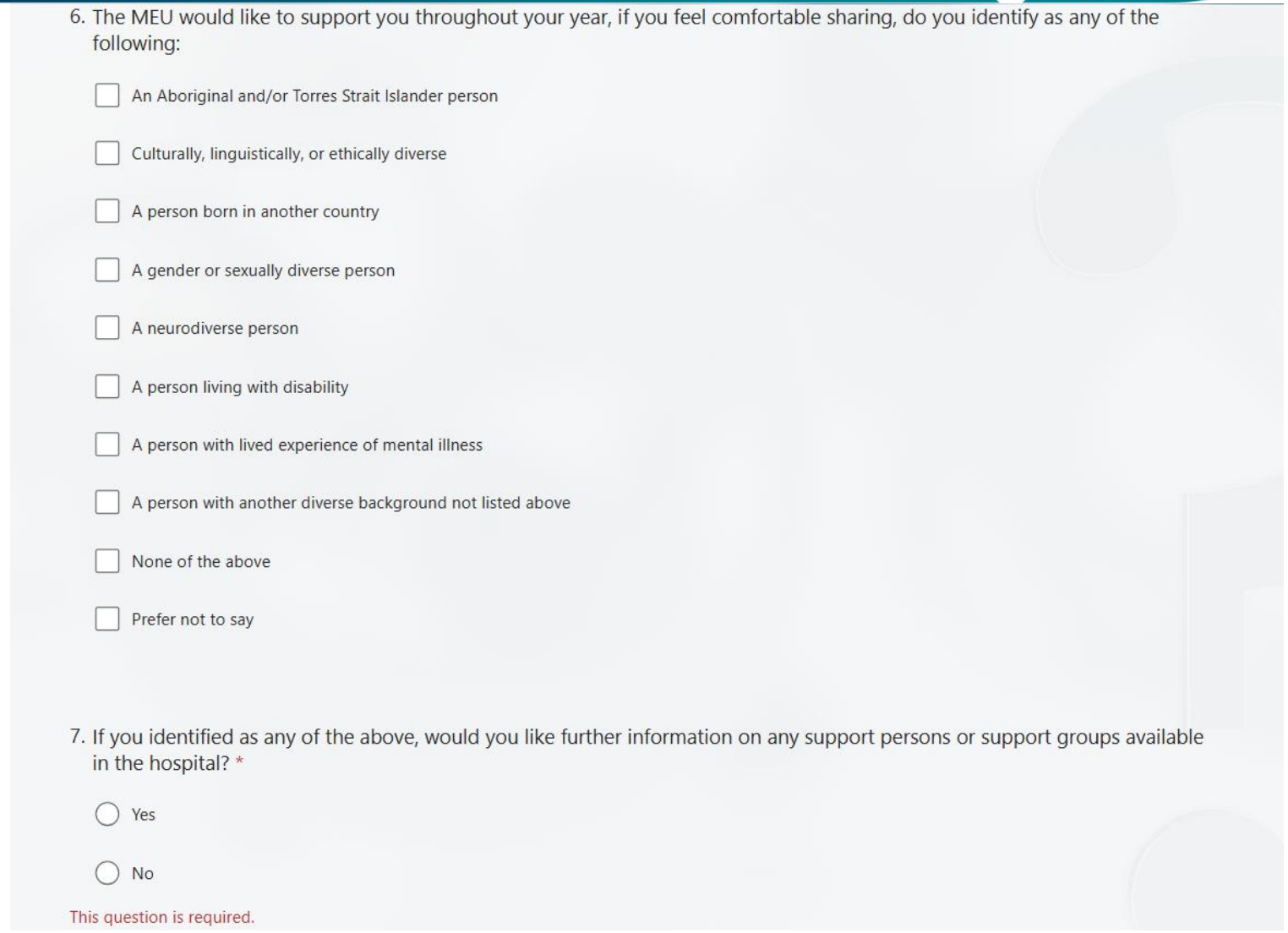
Method

RBWH MEO Pre-Meeting Form

- Background
- Work-life balance
- Goal for the year and the future

2024 Addition: Diversity Question

- Neuro
- Cultural
- Gender/Sexual
- Disability



6. The MEU would like to support you throughout your year, if you feel comfortable sharing, do you identify as any of the following:

- [ ] An Aboriginal and/or Torres Strait Islander person
- [ ] Culturally, linguistically, or ethically diverse
- [ ] A person born in another country
- [ ] A gender or sexually diverse person
- [ ] A neurodiverse person
- [ ] A person living with disability
- [ ] A person with lived experience of mental illness
- [ ] A person with another diverse background not listed above
- [ ] None of the above
- [ ] Prefer not to say

7. If you identified as any of the above, would you like further information on any support persons or support groups available in the hospital? *

- ( ) Yes
- ( ) No

This question is required.

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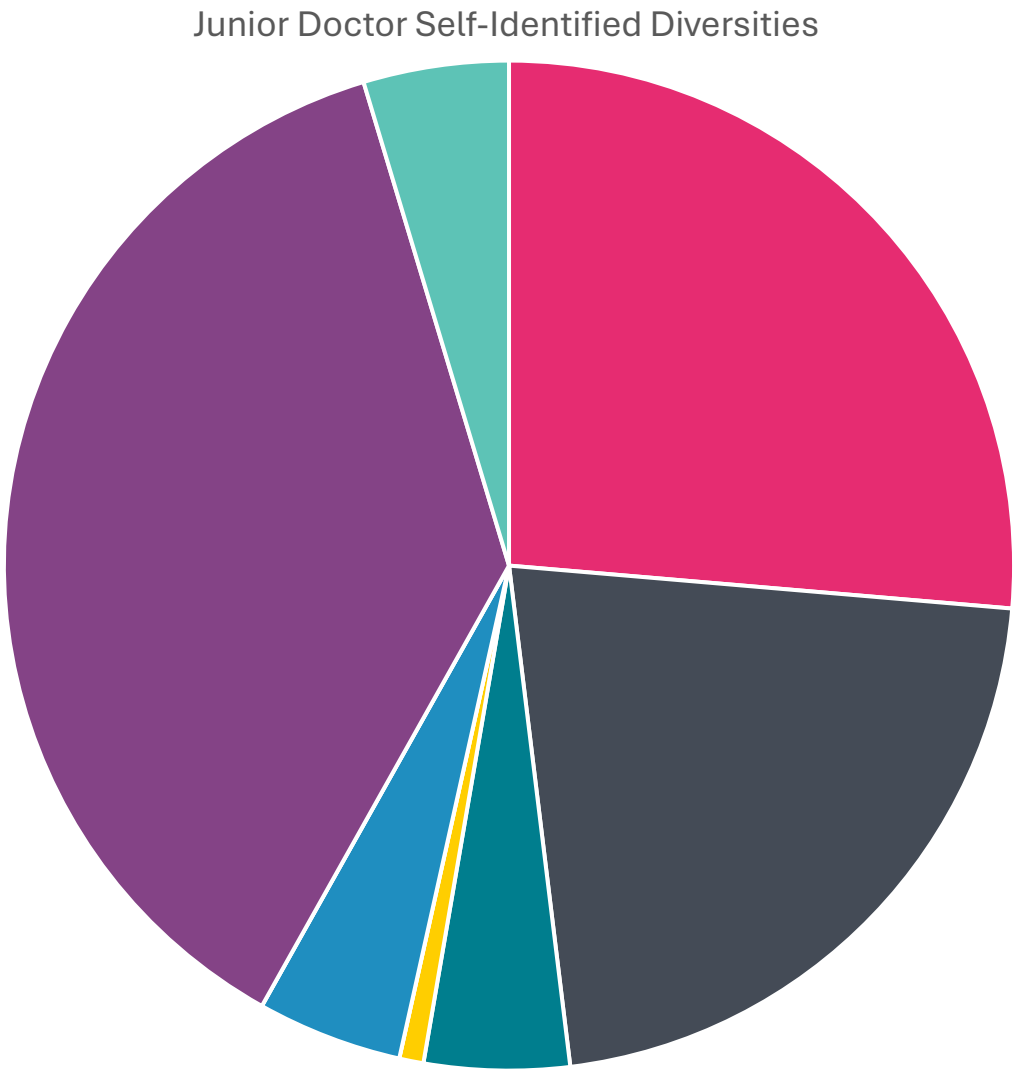
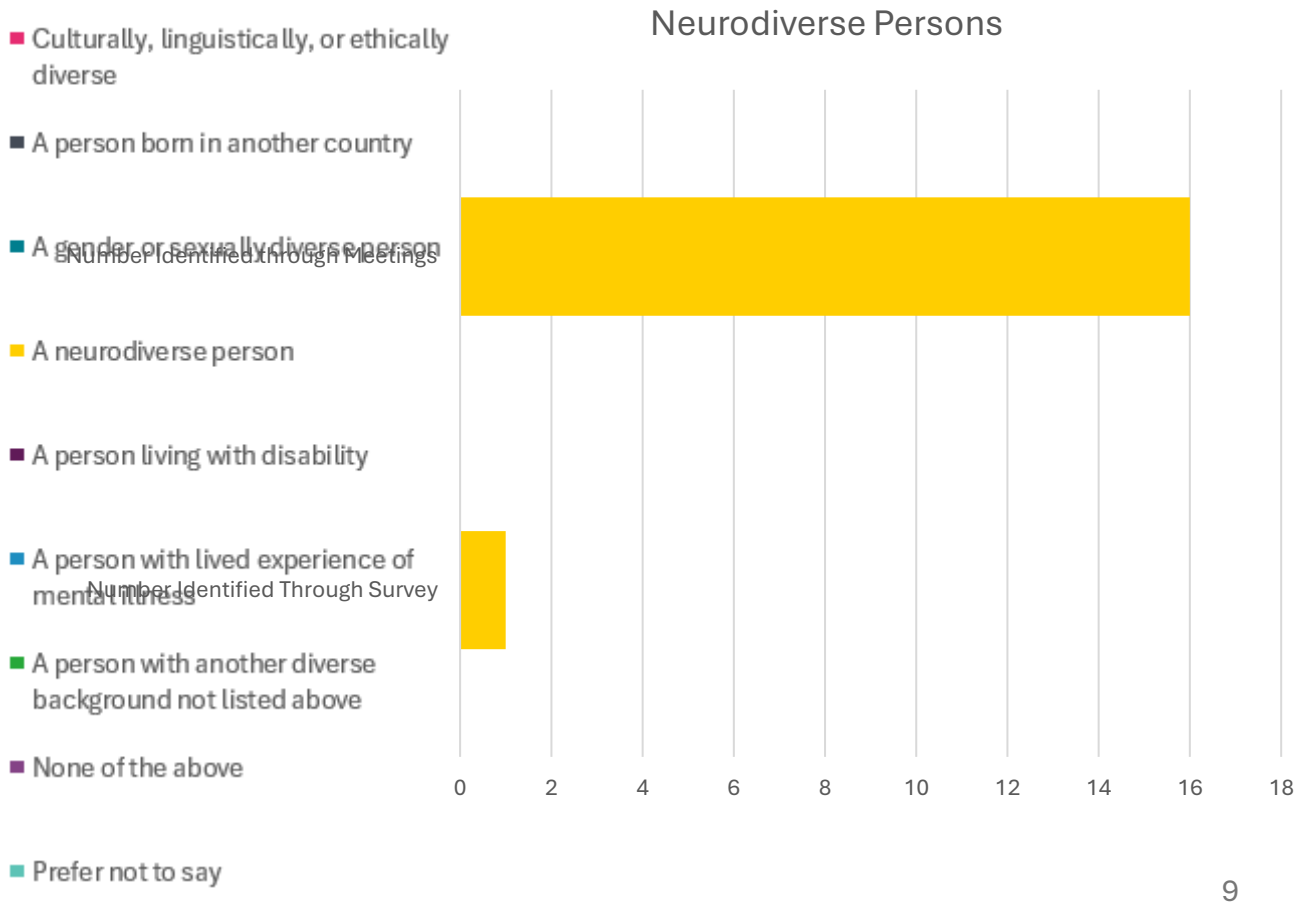
Identification of RMOs





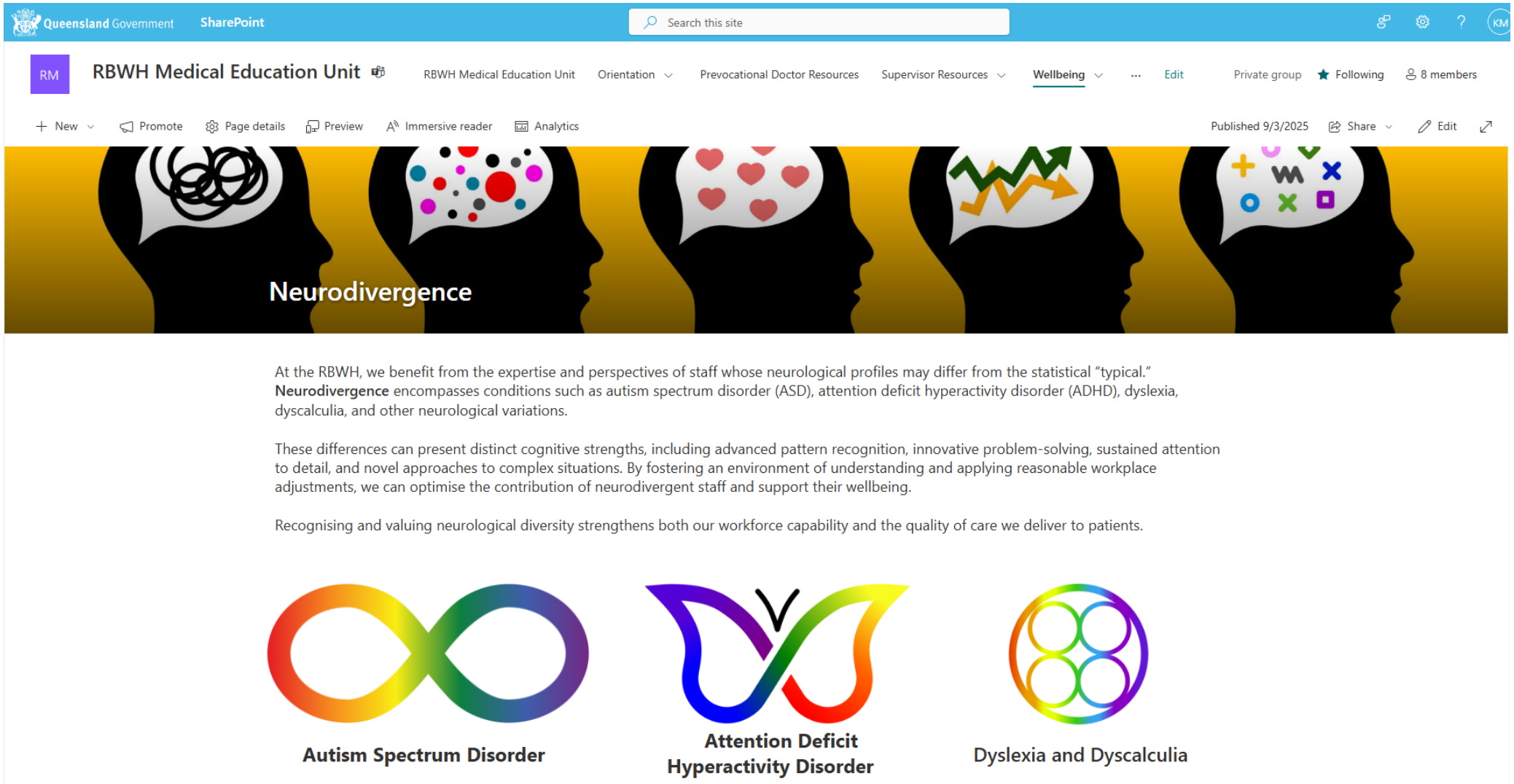
Gaps

Wellbeing Support

Clinical Supervisors and Resources

- Diagnosis
- Evidence Based information
    - Supervisors
    - Junior doctors
- Mentoring options

Bridging the Gap



Don’t make assumptions about neurodivergence.
Ask about a person’s preferences, needs, and goals.

Referencing

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Junior Doctor 1

- Failing term
- Hx of OCD
- End of Term meeting
- Diagnosis pathway
- Supports implemented

Junior Doctor 2

- High achieving doctor
- Disclosed new diagnosis of ADHD and ASD
- Flagged concerns with current term
- Overstimulation
- MEO support

THE SQUARE ACADEMY

Fostering Professional Growth and Leadership in Pharmacy and Pharmaceutical Sciences Education

Presented by Neera Saggar the COO, The Square Academy

PROFESSIONAL GROWTH | LEADERSHIP | PHARMACY EDUCATION

THE SQUARE ACADEMY

The Square Academy: A Decade of Educational Excellence

Mission & Leadership

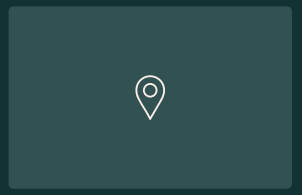
As COO of The Square Academy, I represent an institution that bridges academic theory and clinical excellence. We equip pharmacists with immediately applicable skills that strengthen patient outcomes and healthcare systems.

Global Empowerment

Our mission is to provide high-quality, accessible Continuous Professional Development (CPD) for practitioners across Africa and Asia. We are building a new generation of pharmacy leaders who are clinically competent, professionally confident, and ready to drive systemic change.

A 10-Year Legacy of Growth and Expansion

What started a decade ago as a singular vision to transform pharmacy education has evolved into a multi-continental educational powerhouse — reshaping how pharmacists learn, lead, and practise.



Local Roots

Initial focus on regional pharmaceutical training, building a trusted foundation within local healthcare communities.

Strategic Expansion

Systematically scaling programmes across Africa and Asia, responding to the growing demand for structured CPD in emerging markets.

Pedagogical Innovation

A decade of consistent development in teaching methodologies, learning technologies, and evidence-based curriculum design.

Educational Powerhouse

Today, The Square Academy stands as a recognised leader in pharmacy CPD, shaping practice standards across multiple continents.

Pharmacy Practice is an Evolving Frontier

The Imperative for Growth

The landscape of pharmaceutical sciences is advancing at an unprecedented pace. To remain effective, pharmacists must embrace lifelong learning as a fundamental professional obligation. Static knowledge is no longer sufficient in an era of rapid clinical and technological breakthroughs — continuous development is not optional, it is essential.

Leadership as a Core Competency

Modern practice has shifted decisively from product-oriented to patient-centred care. This transition necessitates that leadership be recognised as a core competency rather than an optional skill. Pharmacists must lead clinical interventions, manage complex care pathways, and advocate for their patients within increasingly integrated health systems.

Academic Reference: Ali, R. (2022). Developing Leadership Skills in Pharmacy Education. *PubMed Central*, PMC9054970.

Empowering Pharmacists Across Africa and Asia

The Square Academy addresses the unique healthcare challenges of diverse regions by delivering customised CPD programmes tailored to specific practice standards, regulatory environments, and clinical contexts.

Regional Relevance

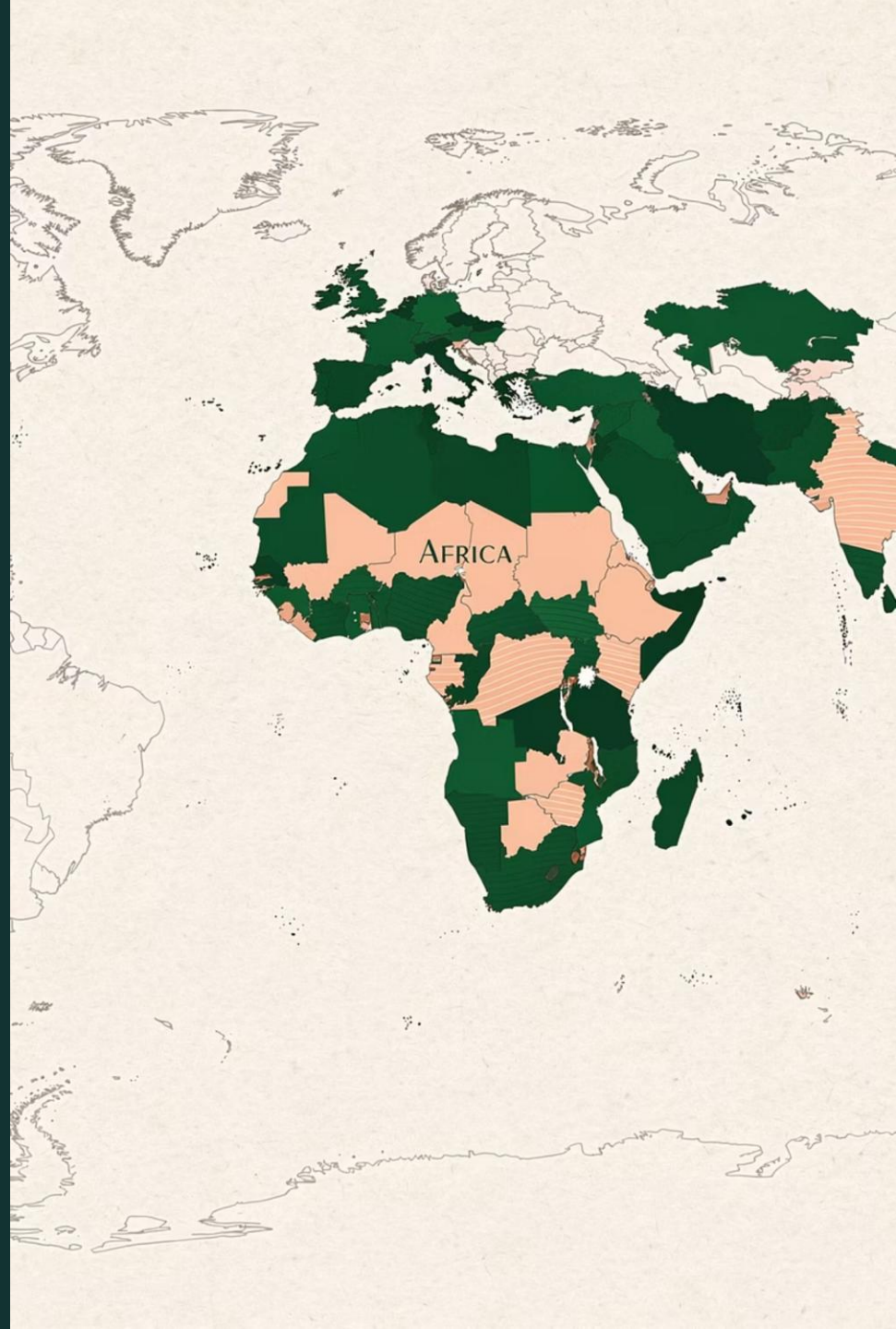
Global pharmaceutical standards are translated into locally meaningful content, ensuring that learning is directly applicable to each practitioner's healthcare environment.

Accessible Delivery

Programmes are designed to be accessible regardless of infrastructure constraints, utilising flexible digital formats suited to practitioners in diverse geographic settings.

Sustainable Leadership

By empowering local practitioners to lead within their own systems, we build lasting capacity for pharmacy excellence that endures beyond individual training events.



Diverse CPD Formats for Real-World Impact

Our curriculum is designed to be as dynamic as the profession itself. We offer a comprehensive suite of learning tools — from interactive self-directed modules and expert-led lectures to live webinars and collaborative workshops — ensuring that every pharmacist finds a format that suits their learning needs and professional schedule.

CPD Format	Primary Focus	Learning Benefit
Interactive Modules	Self-paced exploration	Deep conceptual understanding
Live Webinars	Expert interaction	Real-time Q&A and professional networking
MDT Workshops	Collaborative practice	Enhanced interprofessional communication
Clinical Skills Sessions	Practical application	Improved patient safety and outcomes

Our content addresses the practicalities of modern practice — from effective collaboration within Multi-Disciplinary Teams (MDT) to specialised clinical skills such as teaching patients the correct inhaler technique.

Personalised Learning: Addressing Every Pharmacist's Needs

Effective knowledge transfer requires a deep understanding of individual learning preferences. The Square Academy utilises the VARK model to ensure our CPD modules resonate with every learner, regardless of their preferred style — making education more effective, engaging, and equitable.

Visual (V)

Integration of complex clinical diagrams, pharmaceutical infographics, and high-quality video demonstrations to support visual comprehension of intricate concepts.

Aural (A)

Interactive webinars, expert-led panel discussions, and audio-based clinical case studies that bring real-world scenarios to life through sound and dialogue.

Read/Write (R)

Comprehensive self-directed modules, detailed clinical reference guides, and structured written resources designed for reflective, text-based learners.

Kinesthetic (K)

Practical application exercises and scenario-based clinical simulations that embed learning through doing, reinforcing skills in realistic practice contexts.

Academic Reference: El-Saftawy, E. (2024). Influence of applying VARK learning styles on enhancing education. *PubMed Central*, PMC11426201.

Teaching Leadership as a Core Competency

Leadership in pharmacy must be explicitly taught, not merely acquired through passive experience. At The Square Academy, we integrate structured leadership training into our CPD modules to prepare pharmacists for the complex realities of modern healthcare environments.

Explicit Leadership Education

Our programmes move beyond clinical knowledge to develop the interpersonal, strategic, and advocacy skills required of today's pharmacy leaders. Leadership is treated as a teachable, measurable competency — not a personality trait.

Strategic Areas of Impact

- **MDT Leadership:** Guiding Multi-Disciplinary Teams to optimise patient care pathways and foster collaborative clinical decision-making.
- **Advocacy & Policy:** Equipping pharmacists to influence health policy and champion the profession's expanding role in public health systems.
- **Mentorship:** Building the next generation of pharmacy educators and clinical supervisors across Africa and Asia.

Looking Ahead: The Next Decade of Innovation

As we enter our second decade, The Square Academy remains firmly committed to evolving alongside the pharmaceutical sciences — embracing emerging technologies, forging new global partnerships, and extending our reach to communities where quality CPD is needed most.

Digital Transformation

Integrating AI-driven personalisation and advanced clinical simulation technologies into our CPD modules to deepen engagement and learning outcomes.

Global Partnerships

Strengthening strategic ties with international health organisations, universities, and regulatory bodies to standardise and elevate pharmacy education excellence.

Expanded Reach

Bringing high-quality, contextually relevant education to underserved regions across new continents — ensuring no pharmacist is left behind in the pursuit of professional growth.

References & Contact Information

Academic References

[1] Ali, R. (2022). Developing Leadership Skills in Pharmacy Education. *PubMed Central (PMC)*, PMC9054970.

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[3] FIP Global Report (2021). Pharmacy Education in Sub-Saharan Africa: Building leadership and advocacy. *International Pharmaceutical Federation*.

Get in Touch

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The SQUARE Foundation

MANCHESTER 1824
The University of Manchester

cpws The Centre For Pharmacy Workforce Studies

Division of Pharmacy and Optometry, The University of Manchester

Supporting pharmacists' journeys to become independent prescribers

Ellen Schafheutle

James Higgerson, Calvin Ho, Emma Lovatt,

Ada Moss, Sarah Willis

Pharmacy Education Symposium Prato, July 2026

CPPE
CENTRE FOR PHARMACY POSTGRADUATE EDUCATION

Background

- From summer 2026, UK pharmacists will be independent prescribers (IPs) upon registration
- Implementation of NHS England commissioned IP services in community pharmacy from 2026
- Number of pharmacists with IP increasing in community pharmacy
- Those wishing to train as IPs may need support, not been in formal/ academic education for some time
- Centre for Pharmacy Postgraduate Education (CPPE) implemented ‘Preparing to Train as an IP’ (PTTIP)
  - E-course (aligned: RPS competency framework for IPs)
  - Online workshop; peer groups
  - Optional w/s: academic writing, reflective practice

Study aim

- to explore course effectiveness in supporting pharmacists to gain confidence for academic study prior to a postgraduate IP course
- Objectives
  - reasons for wanting to become an IP and enrolling on PTTIP
  - course effectiveness

Method

- Interviews – 2 time points
  - Early during PTTIP - 12 months later, post completion
  - Explored motivations for becoming IPs and enrolling on PTTIP, course experiences, whether it met expectations, and possible improvements.
- Interview sample: 27
  - 2024: 6
  - 2025: 18
  - 3 interviewed in 2024 & 2025

Results

- Of the 21 interviewees in 2025
  - 11 community pharmacy
  - 9 hospital
  - 2 general practice
- Of the 21 interviewees in 2025
  - 7 had qualified as IPs
  - 8 were accepted or undertaking IP course

Interviewees' motivations for qualifying as IPs – 1

- Upskilling
  - *I am really enthusiastic about developing myself as a pharmacist. I don't want to stay at the same level - you do have to evolve."*
- Career progression and job opportunities
  - *"If I'm talking to [a patient], I'm going through what the issue could be, you've gone through your diagnosis, then the obvious thing is: what do we do to help treat it? It got to the stage where I was doing all of that and going straight to a doctor who just said, okay. And then I just felt, if you can do the whole thing yourself, you don't need to have someone just to say okay. It makes sense, that you take that responsibility on and you follow that patient."*

Interviewees' motivations for qualifying as IPs – 2

- Feeling pressured by 2026 IP pharmacists & general policy direction
  - *"I can see that the environment is moving in that direction. So community pharmacy, hospital pharmacy - all of pharmacy - as I see it, there's a move towards pharmacists being prescribers. I'm also very conscious that the new cohort of newly qualified pharmacists will be coming out qualified as prescribers."*
- To improve patient outcomes
  - *"It's about the opportunity to enhance patient care - giving patients direct access. It's a one-stop shop, really."*

Interviewees' course expectations

- PTTIP offered a starting point for their IP journey
  - *"I was kind of hoping it would support me to do a course I hadn't done before… if I'd stayed in community and then gone straight to the prescriber course, that would have felt very daunting."*
- Increased (academic) confidence
  - *"I already felt there were barriers before I even started, and that was one of the reasons why I did the CPPE course, because it had been so long [since I studied]."*

Perceived benefits and outcomes

- Indeed, course offered:
  - Clearer starting point for IP journey
  - Practical guidance
  - Supported a return to academic study; confidence
    - academic writing and reflective practice
    - *I really liked that course - it kind of set the scene in terms of what is expected of me, how I can build my competence around being a prescribing pharmacist and it kind made me feel like, 'Okay, you know what this is an additional learning that I'm doing just so that I am well prepared [for the IP course].'"*

Challenges
Suggested improvements

- Some had expected more detailed, specialised or academically focused preparation
  - Clarity regarding target audience and PTTIP content
- Peer support networks (e.g. WhatsApp)
  - Considered important but mostly not sustained
  - *“I don’t think I kept in touch with anybody, but it was good to speak to people. You know, different reasons behind why they were doing IP and how they planned to get on the course - because at that point, it was more like, you’re in the process of trying to get onto the course, find a DPP, that sort of thing. So it was good to have other people who were in the same boat as you.”*
- A few felt preparation for academic demands could be strengthened
- Guidance on securing a designated prescribing practitioner (DPP) would be appreciated

Conclusion

- This study offers evidence that PTTIP was effective in building pharmacists' confidence to return to academic study for IP.
- Wider support may be required to ensure access to DPP supervised practice.

CPPE
CENTRE FOR PHARMACY POSTGRADUATE EDUCATION

cpws The Centre For Pharmacy Workforce Studies
Division of Pharmacy and Optometry, The University of Manchester

Deliberate practice simulation training to help preceptors build racially inclusive experiential environments

Michael Wolcott, PharmD, PhD

Amanda C. Savage, PharmD

Heidi N. Anksorus, PharmD

What was our challenge and goal?

- Preceptors are often **required to engage in difficult conversations**, especially about racial & ethnic identities

- Learning to respond to challenging situations can benefit from **deliberate practice**, **reflection**, & **opportunities** for skill building

- **Simulated experiences** may be a useful strategy for preceptor development on managing difficult situations

What is an OSTE?

Objective: *attempt* to convert a desired skill to actions that are quantifiable, measurable, and reliable

Structured: a very focused & specific task presented in a consistent format for all participants

Teaching: scenarios are focused on the educator's interaction with a simulated learner or other personnel

Examination/Experience: an evaluation of the skill set & integration of feedback for improvement

What was an example OSTE prompt?

Preceptor Door Prompt

A new learner started your rotation today. You had an unexpected meeting, so you asked a recently hired teammate to orient them to the practice location, introduce them to other personnel, and have them observe some of their common tasks. **During lunch, the learner asked to meet with you at the end of the day to discuss an uncomfortable situation they observed earlier.** The learner did not want to provide more details about the situation until they could meet with you privately. Please enter the room and meet with the learner to discuss what they observed.

*You will have **up to 10 minutes** for this encounter. When you feel the situation has been appropriately addressed, you may leave the room and return to the small group discussion area. If at any time you feel uncomfortable, please exit the room.*

How were OSTE SPs trained?

Learner (Actor/Standardized Person) Training Information

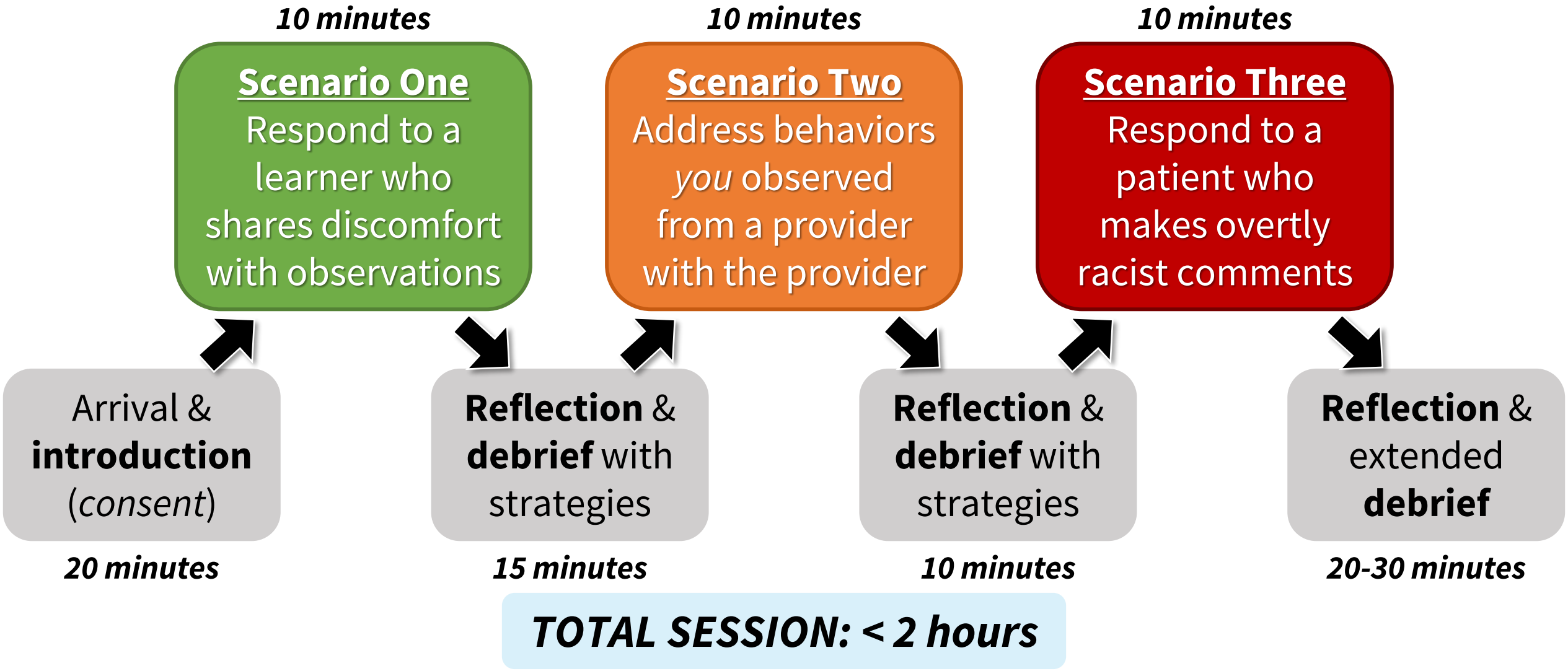
THE OBSERVATIONS TO DISCUSS:

- When you shared your name, the team member said, “wow, there is no way I can pronounce that. What else can I call you?”
- The person frequently made a comment about patients who appear Asian like “*they always ask for weird herbal medicines*”
- You believe you heard the person use a racial slur under the breath when they got frustrated with a patient

YOUR DESIRED BEHAVIORS / ACTIONS:

- Do not disclose all the observations at once – give the preceptor time to ask questions for more information
- Appear distressed or nervous (leg shaking, tense body, minimal eye contact)
- Express apprehension – that you are unsure whether you should discuss it
- You can ask if you’ll get in trouble for saying something & what to do if it happens again

What was the structure for the OSTE?



What were example debriefings?

POST SCENARIO DEBRIEF:

- How are you feeling after the experience?
- What did the experience bring up?
- If you had to complete the interaction again, what would you change?

Sample strategies discussed:

- Triple A – acknowledge, ask, adapt
- LIFT – lights on, impact, full stop, teach
- Stop, talk, & roll
- De-escalation strategies

POST SESSION DEBRIEF:

- What were the key takeaways?
- What do you wish you would have known?
- How does this connect to your work?
- What would help support you?
- What alternative scenarios are needed?
- How will you use this training?

An actor debrief may also be conducted for lessons learned

What were the results of our study?

- **Seven participants**: 100% female, 71% White, median age 28
- Increase in self-reported confidence & abilities
- Minimal impact on perceived stress
- Actors rated preceptors higher than their self-assessment
- Valuable feedback about opportunities for improvement

What were unanticipated challenges?

- Ineffective or destructive scenarios that **perpetuate stereotypes**
- Potential for **re-traumatization** of participants
- Actors want ***detailed*** **back stories**, **boundaries**, & **practice**
- Difficult to **recruit partici**pants & **actors**
- Impact of **socio-political factors** in your region and/or globally

What **questions** can we discuss?

Deliberate practice simulation training to help preceptors build racially inclusive experiential environments

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MONASH University

Embedding cultural diversity in pharmacy education: evaluating the impact of *CulturaLearn* on student engagement and inclusion

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7th July 2026

Pharmacy Education Symposium

MONASH University

MONASH PHARMACY AND PHARMACEUTICAL SCIENCES

This project was supported by a 2024 faculty education innovation grant

Cultural competence in pharmacy education

- **Cultural competence** includes behaviours, attitudes, and policies that support effective cross-cultural care
  - Reduces health inequities for Indigenous and culturally and linguistically diverse (CALD) populations
  - Essential in healthcare education to prepare future practitioners for diverse populations

- Gap remains between education and real-world readiness
- **Diverse case studies and representation** enhance belonging, motivation and engagement, while improving relevance and professionalism

MONASH University

CulturaLearn

Embedding cultural diversity in pharmacy education

Objective

- To enrich pharmacy education with a repository of culturally diverse case studies and narratives, to cultivate cultural competence, support awareness, inclusion, and reflexivity, and evaluate its impact.

Research questions

1. What aspects of EDI do students at the FPPS want to see?
2. What impact does inclusion of case studies celebrating diversity have on students' understanding of EDI?
3. What impact does inclusion of case studies celebrating diversity have on students' feelings of inclusion and representation at university?

FPPS: Faculty of Pharmacy and Pharmaceutical Sciences; EDI: Equity, Diversity and Inclusion

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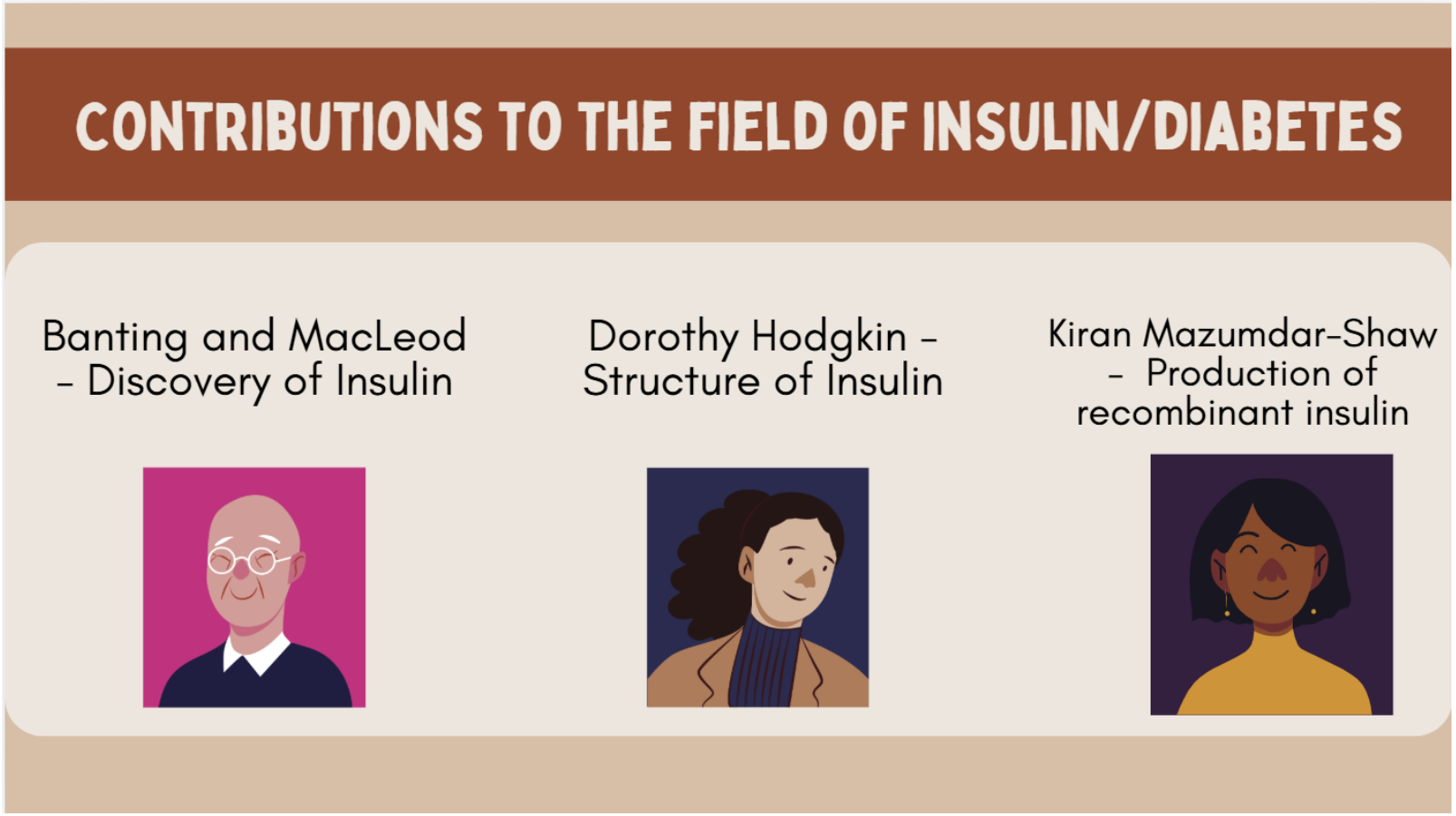
CulturaLearn

CulturaLearn was piloted in 2024 as a curated resource

Example



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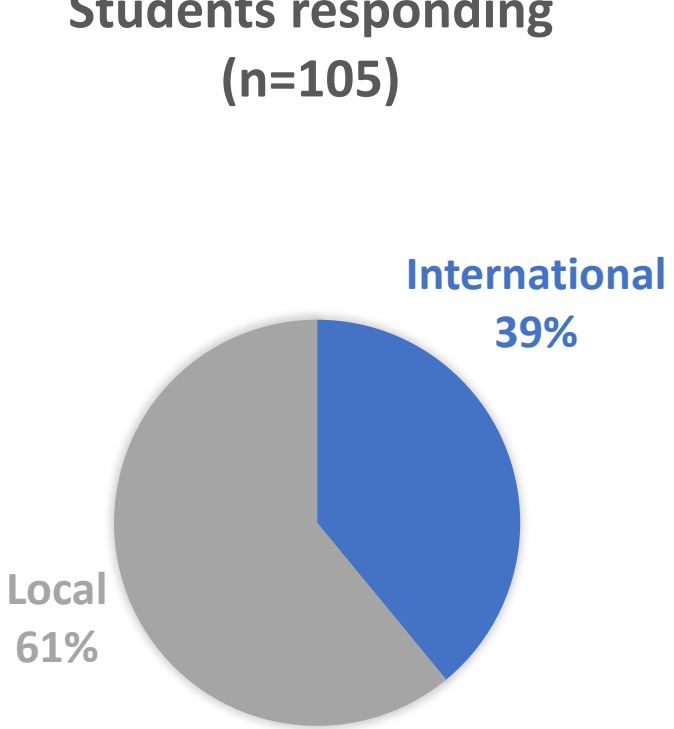
CulturaLearn

CulturaLearn was piloted in 2024 as a curated resource

Methods

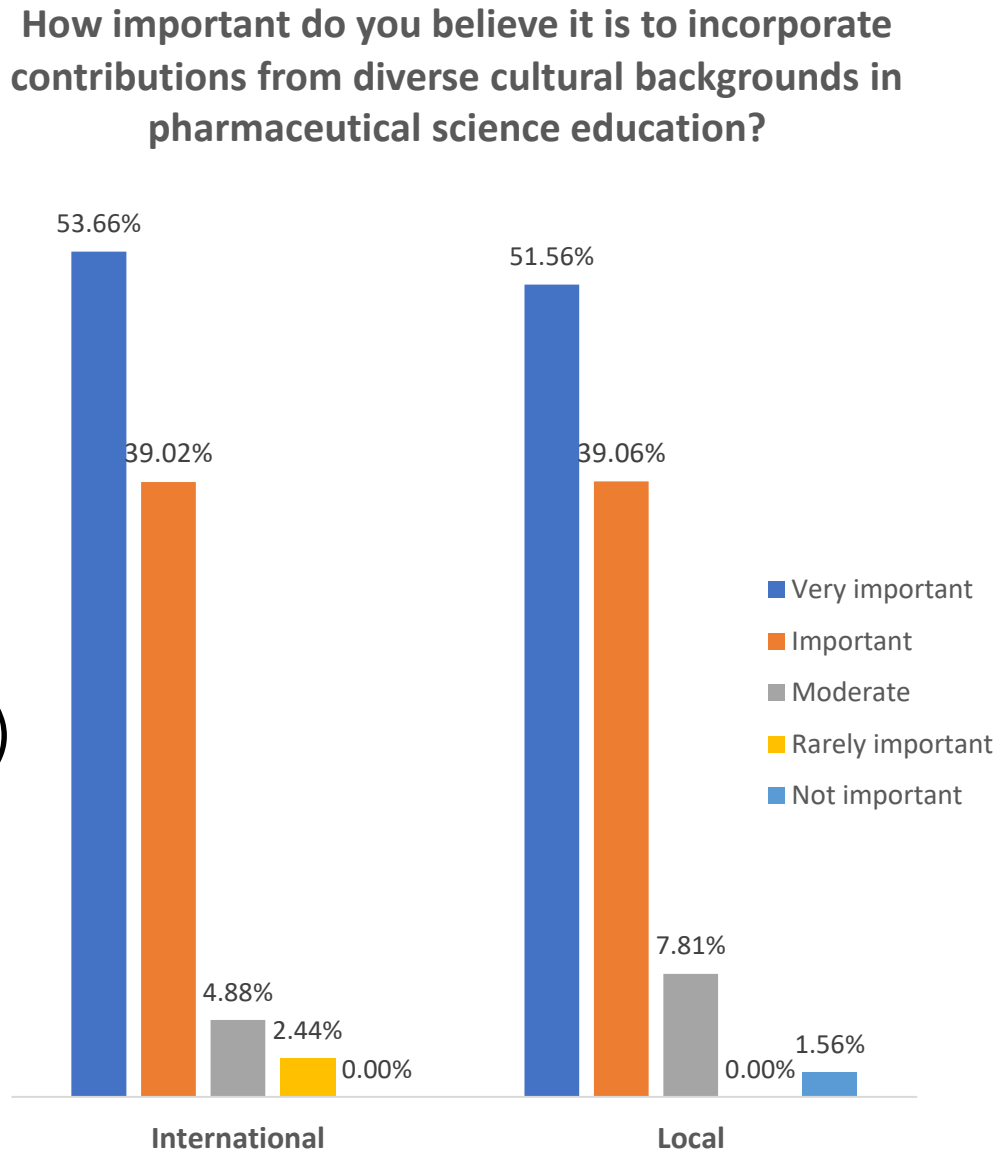
- Second-year undergraduate pharmacy unit (PHR2042)
- Culturally diverse case studies or narratives relevant to the learning material or topic were embedded
- A pre- and post-evaluation design was used, including Likert-scale items on cultural representation, satisfaction, and attitudes, plus closed- and open-ended questions on cultural awareness and curriculum relevance
  - Quantitative data were analysed descriptively
  - Qualitative responses were analysed using inductive thematic analysis



MONASH University

Pre-implementation survey

- Only 16% of students had formal cultural diversity training
- Perceived curriculum diversity was moderately high (3.8 / 5)
- Students highly valued:
  - Incorporating cultural contributions (4.41 / 5)
  - Representation in pharmacy education (4.16 / 5)



What do students at FPPS want to see?

Diversity in educational content

CALD representation

"By getting examples from all over the world or incorporating discoveries not only from the western side but Asian side"

"Include more examples of scientists from other backgrounds Asian, brown, black etc..."

"Include learnings from other cultures and Indigenous Australians"

"Implement more realistic examples of indigenous people"

Indigenous and Torres Strait Islander Representation

"include indigenous, people of colour and black scientists and policy workers in pharmacy"

What do students at FPPS want to see?

Cultural diversity within pharmacy practice

"Discussion of different treatment approaches and the logic/beliefs behind them used in different cultures and how we can apply them to Australian pharmacy."

"maybe learn about medication all around the world, and treatment options based on that"

"Can start to incorporate more differences between pharmacy practices in different countries"

What do students at FPPS want to see?

Cultural awareness and education

"More cultural events to represent our diverse cohort"

"We have a world fair every year which I really like because i love learning about new countries"

"Maybe just chatting more about different cultures??"

"It would be good to educate some countries language, culture, food, religion"

"Providing a different selection of cuisines during events"

"Having speakers of different backgrounds"

CulturaLearn evaluation

20% reported engaging with culturally diverse case studies, describing them as impactful

97% were satisfied with the incorporation of cultural diversity into their curriculum

Awareness of global scientific contributions improved slightly post-intervention

- ***CulturaLearn*** enhanced understanding of pharmacy topics for 50% of respondents, but confidence in working with diverse populations declined (4/5 to 3/5), suggesting increased awareness of knowledge gaps

> *"I read through the slides and it made me realise how little I know about different people contributions"*

- Students **valued** diversity, inclusion, representation and open cultural dialogue
- Students **recommended** broader integration of cultural content and increased representation of Aboriginal and Torres Strait Islander people

Cultural representation increases self-reflection and self-directed learning

Motivated self-directed learning

*"case studies were **a good prompt to dig deeper**. I watched a couple of YouTube interviews of {researcher anonymized} after the workshop last week"*

Fostered personal connection and family engagement

*"researched the people on the web and **found a pharmacist was from my grand dad's town**, lots of discussion at the dinner table that evening with my family."*

Supported self-reflection on knowledge gaps

*"I read through the slides and it **made me realise how little** I know about different people contributions"*

Cultural representation increases interest, motivation, inclusion and belonging

*"It's nice to see people that are more similar to me and it feels more **motivating**"*

*"Let me see people similar to myself **represented** in these fields"*

*"Encourages me to interact more as the cultural representation **inspires** me to do good things in life"*

*"I think cultural representation really **provokes my interest** in learning more about scientific discoveries and research"*

*"Cultural representation relates to us more so makes us **connect** more"*

*"Helps with diversity and feeling **represented**"*

*"It has instilled more **confidence** in me, that I can also do this."*

*"Make me more **empowered** to complete my degree"*

Cultural representation builds knowledge, awareness and professional readiness

Enhances critical thinking and understanding

- *"Different perspectives provoke **critical thinking**"*
- *"More cultures = more **insights** from different **perspectives**"*
- *"Made me think in **broader** ways"*
- *"It widened the **scope** of knowledge and provided a more **perspective** and takes on different topics"*
- *"Allows for more **open** conversations"*
- *"Cultural awareness is very important in expanding our **knowledge**"*

Improves level of awareness

- *"It made me **aware** of scientific discoveries that I had not heard of previously."*
- *"I found the experience eye opening, I had a lack of **awareness** of the work done by pharmacists from developing countries."*
- *"More **representation** of research and discovery from different cultures"*
- *"You would **learn more** of the contributions made by different countries"*

Prepares for professional practice

- *"I think it helped **prepare** for real life scenarios"*
- *"With patient care"*
- *"relates the things i know to the **real world**, allows myself to be more engaged"*
- *"good realistic learning"*
- *"Know **different situations** in different countries"*

Conclusions

- Students value diversity and perceive benefits to learning and engagement when integrated into pharmacy education
- *CulturaLearn* improved awareness and understanding but highlighted complexities in confidence and inclusion
- Sustained, embedded approaches are needed rather than isolated activities
- Future curricula should combine implicit representation with explicit instruction to foster cultural competence and confidence

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Acknowledgements

Betty Exintaris

Nilushi Karunaratne

Amandeep Kaur

Truc Do

Alison Etukakpan

Yassmin Samak

MONASH University

MONASH PHARMACY AND PHARMACEUTICAL SCIENCES

MONASH University

PHARMACY EDUCATION SYMPOSIUM

USING DEBATING AS A CRITICAL THINKING AND COMMUNICATION TOOL IN THE PHARMACY CURRICULUM AT THE UNIVERSITY OF THE WESTERN CAPE

Lorraine Tanya Dube
(B.Pharm, MPH)
Kim Ward (PhD)
Pharmacy Practice

INTRODUCTION

The South African Pharmacy Council specifies exit level outcomes and associated competencies for pharmacy students

Students should be able to **interrogate, critically analyse,** evaluate and transmit knowledge based on current research in the pharmaceutical and relevant clinical and social sciences [1]

In other words, students need to possess higher order thinking skills

WHY DEBATES?

Pedagogical approach used extensively in undergraduate pharmacy programmes [2,3,4]

Develops essential skills to support evidence-based, contextually appropriate, and patient-specific clinical decision-making [5,6]

Fosters reflective practice, facilitates effective multidisciplinary engagement and promotes lifelong learning [5,6]

WHY DEBATES?

Pharmacists are increasingly required to develop higher-order skills in reasoning, argumentation and evaluation to engage critically with policy documents [5,6]

Pharmacists are now required to move beyond discipline-specific systems towards systems thinking in order to contribute towards governance and decision making in various health care contexts [5,6]

Particularly important in low-and middle-income countries

HIGHER EDUCATION CONTEXT IN SOUTH AFRICA

Disparities in academic literacies among students in higher learning institutions

Student groups are rarely homogenous in institutions of higher learning

Partly a legacy of apartheid

Higher education institutions have a responsibility for closing the literacy gap by providing support and structure within academic programmes [7]

UNIVERSITY OF THE WESTERN CAPE CONTEXT

Established in 1960 for people classified as “Coloured”

Referred to as a Historically Disadvantaged Institution (HDI)

It is home to over 23,000 students, majority of whom are first generation university students originating from under-resourced schools [8]

Modern-day mandate of UWC is to contribute towards building a more equitable and dynamic society

“The doors of learning shall remain open”

DEBATES IN PHARMACY PRACTICE

Debates have been incorporated at the second year level in a Pharmacy Practice Course on Policies (Health and Pharmacy) for the last 12 years

Topics in this course are typically considered to be controversial and allow for different perspectives

It is also important to introduce academic literacies early and continue to build on these skills throughout the undergraduate programme

DEBATE OBJECTIVES

Facilitate active participation in a co-operative and interactive process;

Introduce students to controversial topics in health and pharmacy in South Africa;

Exercise verbal communication;

Think deeply, logically and critically;

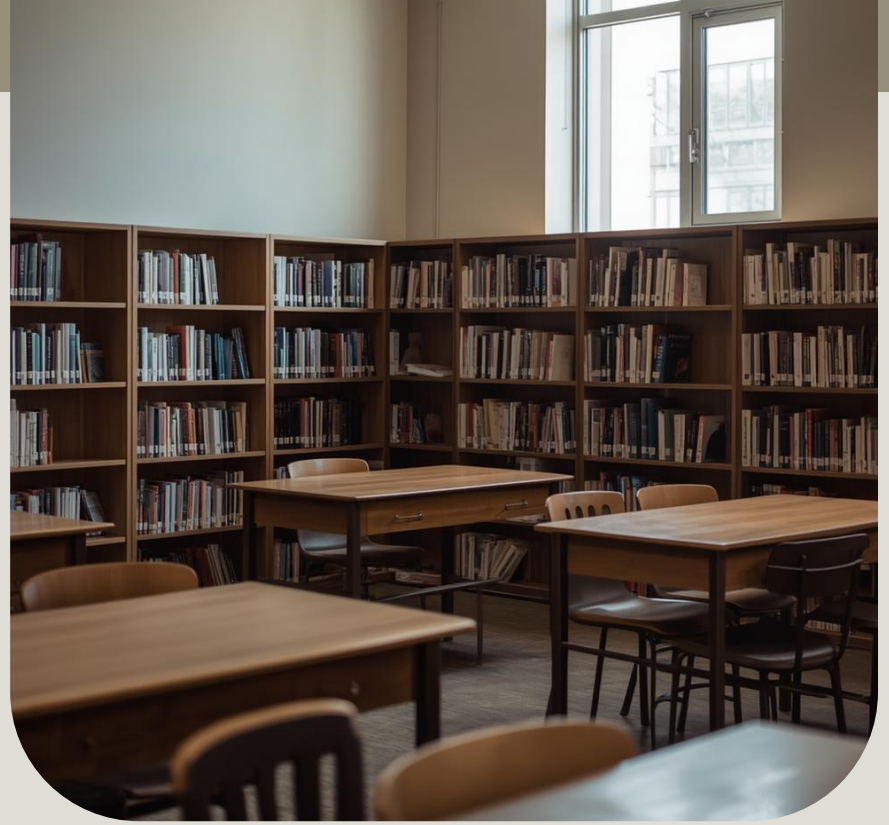
Clearly articulate arguments;

Use appropriate evidence to support ideas and to appreciate diverse opinions.

DEBATES TOPICS

Debate topic
Pharmaceutical Care is a luxury confined to the private sector
"Essential Medicines Programme" is the cornerstone of a National Medicines Policy
Prophylaxis (PrEP) is a good HIV prevention strategy
The National Health Insurance (NHI) is pro-poor
Under the NHI, the quality of health services will improve
Pharmacies should sell HIV home test kits
Pharmacy mid-level workers are a threat to pharmacists
Imposing sugar tax is a good public health intervention

PREPARING FOR THE DEBATE



Orientation

Orientation workshop to introduce argument construction, timing and presentation etiquette

Resolution assignment

Debating teams, consisting of six students each, are assigned a topic (resolution) and position (for and against)

Consultation

Each debating team is allocated 30 minute time slot for consultation with a lecturer to receive guidance on the soundness, validity of the arguments and evidence

.

DELIVERY OF THE DEBATES

01

Structure: Opposing and affirmative team members deliver the debates in a sequence of introductions, arguments, rebuttals and conclusion.

02

Debate arguments are structured as **assertion, reason and evidence.**

03

Rebuttal: Critically evaluating opposing arguments and responding with reasoned, professional counter-points.

04

Questions: two observing groups (not debating) formulate and pose questions to both sides of the debates.

ARGUMENT COMPONENTS

Assertion - A claim or statement that needs to be proven or explained

Reason - The act of proving an assertion by explaining, describing, and elaborating

Evidence - Facts, information, or observations presented in support of an assertion

ASSESSMENT

GROUPNUMBER: Topic: Affirmative/Negative: Date of debate:

	8-10 (Excellent)	6-7 (Good)	4-5 (Fair)	<4 (Poor)	Mark allocation
Introduction	Clear and concise definition of topic & overview of main points that will be argued.	Understandable definition of topic & overview of main points that will be argued.	Some key terms in definition not clearly explained.	Definition unclear.	X1
Argument 1	Well-constructed argument based on sound evidence	Well-constructed argument but not based on sound evidence	Fair argument but no evidence	Poorly constructed arguments	__ X1
Argument 2	Well-constructed argument based on sound evidence	Well-constructed arguments but not based on sound evidence	Fair argument but no evidence	Poorly constructed arguments	X1
Argument 3	Well-constructed argument based on sound evidence	Well-constructed arguments but not based on sound evidence	Fair argument but no evidence	Poorly constructed arguments	__ X1
Argument 4	Well-constructed argument based on sound evidence	Well-constructed argument but not based on sound evidence	Fair argument but no evidence	Poorly constructed arguments	X1
Rebuttal	All relevant opposing statements identified and discredited with good reasons.	All relevant opposing statements identified and some well-discredited	Some opposing statements correctly identified and discredited	Few opposing statements correctly identified	__ X1
Conclusion	Clear and concise summary of arguments and appropriate closing statement.	Understandable summary of arguments and a closing statement	Some key points in argument not mentioned	Few key arguments summarised.	X1
Organisation	Logical flow to debate; responsive to previous speaker; clear link between arguments	Mostly logical in flow; not always responsive to previous speaker; link between arguments not always clear	Some logic in flow but not very coherent; very little to no link between arguments	Mostly incoherent; no link between arguments	__ X2
Style: good body language (eye contact, clarity of speech, change in tone to emphasis key pts)	Attention given to all style aspects	Attention given to most style aspects	Attention given to some style aspects	Very little attention given to any of style aspects	X1
Professionalism (punctuality, collegiality, vocabulary, attire)	Attention given to all points on professionalism	Attention given to most points on professionalism	Attention given to some points on professionalism	Very little attention given to any of points on professionalism	X1
Total					__/110

OUTCOMES

Positive

Results based on student evaluations of both the debates and module

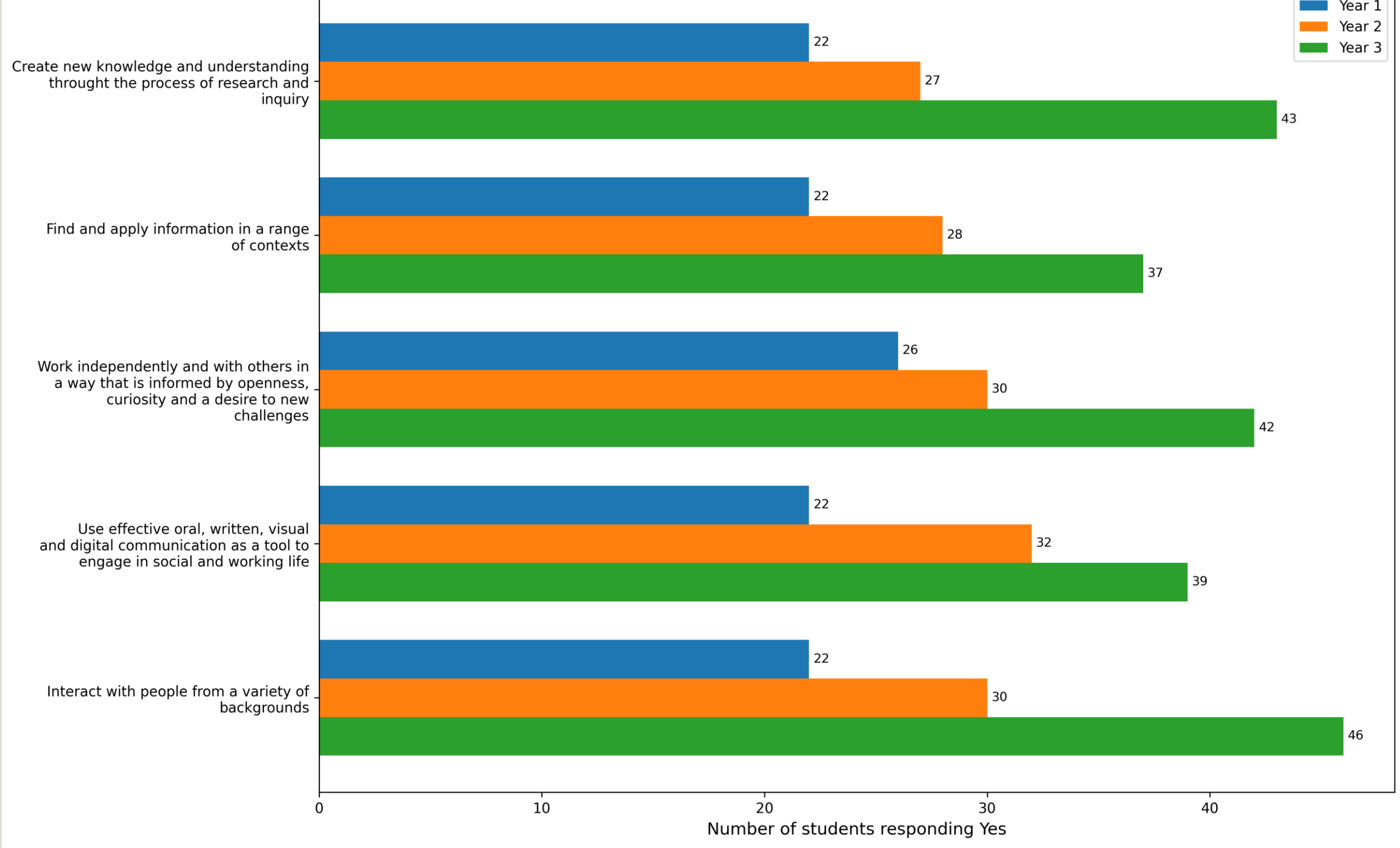
- Positive perceptions of debate-related learning outcomes
- Positive perception increased over time

Challenges

- Time intensive for instructors

Confidence and communication challenges appear to be increasing as the years progress

- Use of large language models to construct arguments


Year 1
Year 2
Year 3
Create new knowledge and understanding throught the process of research and inquiry
22
27
43
Find and apply information in a range of contexts
22
28
37
Work independently and with others in a way that is informed by openness, curiosity and a desire to new challenges
26
30
42
Use effective oral, written, visual and digital communication as a tool to engage in social and working life
22
32
39
Interact with people from a variety of backgrounds
22
30
46
0
10
20
30
40
Number of students responding Yes

THE FUTURE

.The use of LLMs has necessitated a change in the design of the debates. Starting this year, enhanced support is provided to students to cater for students who may have little or no academic literacies. Two tutorials, lasting 2.5 hours each were convened. Pharmacy tutors reinforce disciplinary concepts, strengthen theoretically grounded reasoning and guide students on professional communication. Writing centre tutors facilitate argument structure and logic, and academic writing. Students use lecture notes and academic references, but are not permitted to use LLMs. An evaluation of this revised strategy is currently underway.

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THANK YOU
NGIYABONGA
KEA LEBOHA
ENKOSI
LEBOGA
DANKIE
THANKS

QUESTIONS?

University of Reading

A novel use of gradescope® to manage MPharm OSCE marking – a case study.

Kate Fletcher

Associate Professor of Pharmacy
Education & Practice

Pharmacy

Outline

- What is gradescope®?
- What do OSCEs look like at Reading?
- What did we want to achieve?
- What did we do?
- Has it worked in practice?
- Conclusion

University of Reading

What is gradescope?

- Marking (grading) software tool
- Typically used to mark handwritten exams
- Rubric made for each question

What do OSCEs look like at Reading?

- Around 150 students per cohort
- Years 2 & 3: 4 stations run in one day
- Year 4: 8 stations in 2 days
- 13 minutes per station
- Generate a lot of paper!

A typical marking scheme

PM2PY1 OSCE HLA main exam 2024-25 marking scheme

Student Name: ..... Date: .....

Marker: .....

	OPENING THE CONSULTATION	Not met	Met
1	Appropriate introduction - name	0	1
2	Appropriate introduction - role	0	1
3	Washes/sanitises hands before **and** after consultation	0	1
4	Explains procedure to the patient - purpose **and** what is involved	0	1
5	Gains consent from patient – verbal **and** written	0	1
6	Confirms drug **and** medical history	0	1
	PREPARING THE PATIENT	Total(6):	
7	Ensures patient is ready for assessment - checks patient has been sitting for 5/10 minutes, not smoked or had caffeine for 20-30 minutes	0	1
8	Ensures accurate readings can be made – asks patient to remove bulky top, shoes, empty pockets	0	1
	BLOOD PRESSURE	Total(2):	
9	Correctly positions BP monitor - cuff placed above elbow at heart height **and** tube comes down arm in line with middle finger	0	1
10	Correctly positions patient - arm rests relaxed on table **and** feet flat on floor	0	1
11	Correctly instructs patient - not to talk **and** not to move while machine working	0	1
12	Undertakes measurement - presses start button, records correct BP	0	1
13	Undertakes measurement - reassures patient the cuff will become tight, but this is normal	0	1
	HEIGHT, WEIGHT, BMI	Total(5):	
14	Correctly measures height - asks patient to stand straight **and** look straight ahead **and** place head against plate, lowers head plate gently to highest part of head,	0	1
15	Records correct height	0	1
16	Correctly measures weight - asks patient to step onto scales, in centre of footplate,	0	1
17	Records correct weight	0	1
18	Calculates patient's BMI (kg/m^2) correctly **23.67**	0	3
	DISCUSSION OF RESULTS	Total(7):	
19	BMI assessment results – documents them, tells patient, explains is normal	0	3
20	BP assessment results – documents them, tells patient, explains is normal	0	3
	LIFESTYLE	Total(6):	
21	Establishes patient's lifestyle – asks about exercise, diet, smoking **and** alcohol	0	1
22	Gives healthy lifestyle advice - advises patient to increase physical activity	0	1
23	Gives healthy lifestyle advice - explains health benefits (must mention at least 2 benefits: maintains normal BP, reduces risk of developing diabetes, reduces risk of cancer)	0	1
24	Gives tips to be more active (must mention at least 2 tips: build up to 2.5-3 hours (150-180 mins) of exercise per week, going for a walk at lunchtime, exercising with friends, or other reasonable suggestions.)	0	1
	CLOSING THE CONSULTATION	Total(4):	
25	Provides safety net e.g. 'come back to see me if you have any questions'	0	1
26	Agrees health goals with patient – agrees goals with patient to be more active	0	1

PM2PY1 OSCE HLA main exam

27	Agrees health goals with patient - **guides patient** to decide the health goals	0	3
28	Checks patient understanding - checks at end	0	1
29	Checks patient understanding – *and* checks throughout	0	1
30	Concludes in a professional manner	0	1
	BEHAVIOURAL INDICATORS	Total(8):	
31	Appropriate use of open **and** closed questions	0	1
32	Avoids medical jargon that may affect patient understanding	0	1
33	Listens actively (e.g. picks up cues/responds appropriately…)	0	1
34	Systematic **and** organised	0	1
35	Patient satisfaction with consultation (marker, ask actor for this) (actor: would you see this HCP again? Did they listen to you? Do you trust them?	0	2
36	Respects diversity and cultural differences – does **not** demonstrate stereotyping or cultural insensitivity	0	1
37	Demonstrates empathy and keeps the person at the centre of their approach at all times	0	1
38	Instils confidence, assertive where needed, guides patient to set health goals	0	1
		Total(9):	

Marker please ensure every item is marked, calculate overall mark, and calculate the % to 1 decimal place.

Overall mark (out of 47) ..... = ...%

Overall management of task –
Marker, please give opinion on this by choosing one of the 4 levels below:

Fail overall	Fail station	Borderline	Pass	Excellent Pass
Student writes anything that would cause serious harm or death	Student inappropriately or ineffectively manages the task, but it would not cause serious harm/death. For example: - does not identify poor lifestyle issue correctly and counsel patient to improve it. - does not ask about one or more lifestyle criteria. - does not ask about exercise and therefore does not address patient's lifestyle issue.	Student barely manages the task appropriately, but it would not cause serious harm/death, for example: poor behaviours, lack of appropriate lifestyle advice, inappropriate referral to doctor; does not measure BP/height/weight properly. For example: - bulky top/coat, shoes still on, heavy things still in pockets e.g. phone and keys	Student appropriately manages the task.	Student demonstrates exceptional undertaking of the task, minimal errors. For example: - exceeds behavioural indicators. - clear and logical structure to the consultation - guides patient to set goals

Please give details if Fail or Borderline or Excellent pass:

OSCE review panel comments / decision:

We needed a solution…

- Tried MS Forms… didn't work, too much scrolling, not good for visual tracking
- Contacted our academic support team for advice
- Put in touch with colleagues specialising in technology enhanced learning
  - Invited them to observe mock OSCEs
  - They suggested we try out gradescope
  - Trained the academic team (less than 1 hour)
- Piloted gradescope in mock OSCEs

After some trial and error:

Before

PM2PY1 OSCE HLA main exam

PM2PY1 OSCE HLA main exam 2024-25 marking scheme

Student Name: ..... Date: .....

Marker: .....

	OPENING THE CONSULTATION	Not met	Met
1	Appropriate introduction - name	0	1
2	Appropriate introduction - role	0	1
3	Washes/sanitises hands before **and** after consultation	0	1
4	Explains procedure to the patient - purpose **and** what is involved	0	1
5	Gains consent from patient – verbal **and** written	0	1
6	Confirms drug **and** medical history	0	1
	PREPARING THE PATIENT	Total(6):	
7	Ensures patient is ready for assessment - checks patient has been sitting for 5/10 minutes, not smoked or had caffeine for 20-30 minutes	0	1
8	Ensures accurate readings can be made – asks patient to remove bulky top, shoes, empty pockets	0	1
	BLOOD PRESSURE	Total(2):	
9	Correctly positions BP monitor - cuff placed above elbow at heart height **and** tube comes down arm in line with middle finger	0	1
10	Correctly positions patient - arm rests relaxed on table **and** feet flat on floor	0	1
11	Correctly instructs patient - not to talk **and** not to move while machine working	0	1
12	Undertakes measurement - presses start button, records correct BP	0	1
13	Undertakes measurement - reassures patient the cuff will become tight, but this is normal	0	1
	HEIGHT, WEIGHT, BMI	Total(5):	
14	Correctly measures height - asks patient to stand straight **and** look straight ahead **and** place head against plate, lowers head plate gently to highest part of head,	0	1
15	Records correct height	0	1
16	Correctly measures weight - asks patient to step onto scales, in centre of footplate,	0	1
17	Records correct weight	0	1
18	Calculates patient's BMI (kg/m²) correctly 23.67	0	3
	DISCUSSION OF RESULTS	Total(7):	
19	BMI assessment results – documents them, tells patient, explains is normal	0	3
20	BP assessment results – documents them, tells patient, explains is normal	0	3
	LIFESTYLE	Total(6):	
21	Establishes patient's lifestyle – asks about exercise, diet, smoking **and** alcohol	0	1
22	Gives healthy lifestyle advice - advises patient to increase physical activity	0	1
23	Gives healthy lifestyle advice - explains health benefits (must mention at least 2 benefits: maintains normal BP, reduces risk of developing diabetes, reduces risk of cancer)	0	1
24	Gives tips to be more active (must mention at least 2 tips: build up to 2.5-3 hours (150-180 mins) of exercise per week, going for a walk at lunchtime, exercising with friends, or other reasonable suggestions.)	0	1
	CLOSING THE CONSULTATION	Total(4):	
25	Provides safety net e.g. 'come back to see me if you have any questions'	0	1
26	Agrees health goals with patient – agrees goals with patient to be more active	0	1
27	Agrees health goals with patient - **guides patient** to decide the health goals	0	3
28	Checks patient understanding - checks at end	0	1
29	Checks patient understanding – *and* checks throughout	0	1
30	Concludes in a professional manner	0	1
	BEHAVIOURAL INDICATORS	Total(8):	
31	Appropriate use of open **and** closed questions	0	1
32	Avoids medical jargon that may affect patient understanding	0	1
33	Listens actively (e.g. picks up cues/responds appropriately…)	0	1
34	Systematic **and** organised	0	1
35	Patient satisfaction with consultation (marker, ask actor for this) (actor: would you see this HCP again? Did they listen to you? Do you trust them?	0	2
36	Respects diversity and cultural differences – does **not** demonstrate stereotyping or cultural insensitivity	0	1
37	Demonstrates empathy and keeps the person at the centre of their approach at all times	0	1
38	Instils confidence, assertive where needed, guides patient to set health goals	0	1
		Total(9):	

Marker please ensure every item is marked, calculate overall mark, and calculate the % to 1 decimal place.

Overall mark (out of 47) ..... = ...%

Overall management of task –
Marker, please give opinion on this by choosing one of the 4 levels below:

Fail overall	Fail station	Borderline	Pass	Exc
Student writes anything that would cause serious harm or death	Student inappropriately or ineffectively manages the task, but it would not cause serious harm/death. For example: - does not identify poor lifestyle issue correctly and counsel patient to improve it. - does not ask about one or more lifestyle criteria. - does not ask about exercise and therefore does not address patient's lifestyle issue.	Student barely manages the task appropriately, but it would not cause serious harm/death, for example: poor behaviours, lack of appropriate lifestyle advice, inappropriate referral to doctor; does not measure BP/height/weight properly. For example: - bulky top/coat, shoes still on, heavy things still in pockets e.g. phone and keys	Student appropriately manages the task.	Stu… exceptional undertaking of the task, minimal errors. For example: - exceeds behavioural indicators. - clear and logical structure to the consultation - guides patient to set goals

Please give details if Fail or Borderline or Excellent pass:

OSCE review panel comments / decision:

After

PM2PY1 HLA main Please mark in pen.

PM2PY1 OSCE HLA main exam 2024-25 marking scheme

Student Name: ..... Date: .....

Marker: .....

	OPENING THE CONSULTATION	Not met ×	Met ✓
1	Appropriate introduction - name		
2	Appropriate introduction - role		
3	Washes/sanitises hands before **and** after consultation		
4	Explains procedure to the patient - purpose **and** what is involved		
5	Gains consent from patient – verbal **and** written		
6	Confirms drug **and** medical history		
	PREPARING THE PATIENT		
7	Ensures patient is ready for assessment - checks patient has been sitting for 5/10 minutes, not smoked or had caffeine for 20-30 minutes		
8	Ensures accurate readings can be made – asks patient to remove bulky top, shoes, empty pockets		
	BLOOD PRESSURE		
9	Correctly positions BP monitor - cuff placed above elbow at heart height **and** tube comes down arm in line with middle finger		
10	Correctly positions patient - arm rests relaxed on table **and** feet flat on floor		
11	Correctly instructs patient - not to talk **and** not to move while machine working		
12	Undertakes measurement - presses start button, records correct BP		
13	Undertakes measurement - reassures patient the cuff will become tight, but this is normal		
	HEIGHT, WEIGHT, BMI		
14	Correctly measures height - asks patient to stand straight **and** look straight ahead **and** place head against plate, lowers head plate gently to highest part of head,		
15	Records correct height		
16	Correctly measures weight - asks patient to step onto scales, in centre of footplate,		
17	Records correct weight		
18	Calculates patient's BMI (kg/m²) correctly 23.67		
	DISCUSSION OF RESULTS		
19	BMI assessment results – documents them, tells patient, explains is normal		
20	BP assessment results – documents them, tells patient, explains is normal		
	LIFESTYLE		
21	Establishes patient's lifestyle – asks about exercise, diet, smoking **and** alcohol		
	…lifestyle advice - advises patient to increase physical activity		

PM2PY1 HLA main Please mark in pen.

	…th goals with patient – agrees goals with patient to be more active		
27	Agree…th goals with patient - **guides patient** to decide the health goals		
28	Checks patient understanding - checks at end		
29	Checks patient understanding – *and* checks throughout		
30	Concludes in a professional manner		
	BEHAVIOURAL INDICATORS		
31	Appropriate use of open **and** closed questions		
32	Avoids medical jargon that may affect patient understanding		
33	Listens actively (e.g. picks up cues/responds appropriately…)		
34	Systematic **and** organised		
35	Patient satisfaction with consultation (marker, ask actor for this) (actor: would you see this HCP again? Did they listen to you? Do you trust them?		
36	Respects diversity and cultural differences – does **not** demonstrate stereotyping or cultural insensitivity		
37	Demonstrates empathy and keeps the person at the centre of their approach at all times		
38	Instils confidence, assertive where needed, guides patient to set health goals		

Please mark in pen.

Overall management of task –

Fail overall	Fail (F)	Borderline (B)	Pass (P)	Excellent Pass (E)
	Markers: Please indicate your judgement of overall management by writing the corresponding letter clearly in the adjacent box:			
Student writes anything that would cause serious harm or death	Student inappropriately or ineffectively manages the task, but it would not cause serious harm/death. For example: - does not identify poor lifestyle issue correctly and counsel patient to improve it. - does not ask about one or more lifestyle criteria. - does not ask about exercise and therefore does not address patient's lifestyle issue.	Student barely manages the task appropriately, but it would not cause serious harm/death, for example: poor behaviours, lack of appropriate lifestyle advice, inappropriate referral to doctor; does not measure BP/height/weight properly. For example: - bulky top/coat, shoes still on, heavy things still in pockets e.g. phones and keys	Student appropriately manages the task.	Student demonstrates exceptional undertaking of the task, minimal errors. For example: - exceeds behavioural indicators. - clear and logical structure to the consultation - guides patient to set goals

Please give details if Fail or Borderline:
If unsure of outcome, please record here what student says or does that makes you unsure.

OSCE review panel comments / decision:

Marker, please gather together the student's consent/results sheet, standardised results sheet and marking sheet, and hand over to room staff when ready.

Each row on marking scheme is 1.75cm high

First version marking scheme - scanned

Please mark in pen.

PM2PY1 OSCE HLA resit exam 2024-25 marking scheme

Student Nam [redacted] Date: 02/09/25

Marker [redacted]

Marker: these pages will be scanned and read by Gradescope, please ensure you write your cross or tick clearly in the appropriate box for each item. Please minimise use of ticks elsewhere on the pages to minimise misreading.

		Not met ×	Met ✓
	OPENING THE CONSULTATION		
1	Appropriate introduction - name		✓
2	Appropriate introduction - role		✓
3	Washes/sanitises hands before and after consultation		✓
4	Explains procedure to the patient - purpose **and** what is involved		✓
5	Gains consent from patient – verbal **and** written		✓
6	Confirms drug **and** medical history		✓
	PREPARING THE PATIENT	Not met ×	Met ✓
7	Ensures patient is ready for assessment - checks patient has been sitting for 5-10 minutes, not smoked or had caffeine for 20-30 minutes		✓
8	Ensures accurate readings can be made -remove bulky top, shoes, empties pockets		✓
	BLOOD PRESSURE	Not met ×	Met ✓
9	Correctly positions BP monitor - cuff placed above elbow at heart height **and** tube comes down arm in line with middle finger		✓
10	Correctly positions patient - arm rests relaxed on table **and** feet flat on floor		✓
11	Correctly instructs patient - not to talk **and** not to move while machine working		✓

PM2PY1 HLA resit

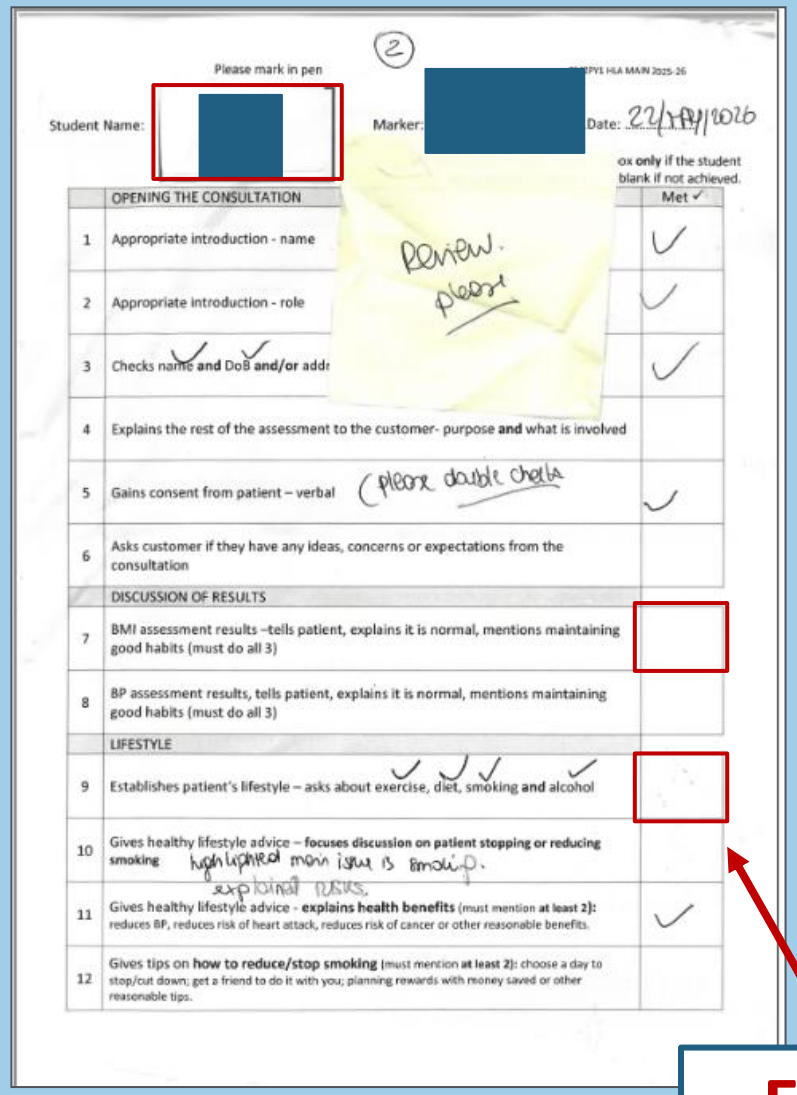
Please mark in pen.

12	Undertakes measurement - presses start button		✓
13	Undertakes measurement - reassures patient the cuff will become tight, but this is normal		✓
	HEIGHT, WEIGHT, BMI	Not met ×	Met ✓
14	Correctly measures height - asks patient to stand straight **and** look straight ahead **and** place head against plate, lowers head plate gently to highest part of head,		✓
15	Records correct height	×	
16	Correctly measures weight - asks patient to step onto scales, in centre of footplate,		✓
17	Records correct weight		✓
18	Calculates patient's BMI (kg/m²) correctly 22.86 (12.85)		✓
	DISCUSSION OF RESULTS	Not met ×	Met ✓
19	BMI assessment results – documents them, tells patient, explains if low, normal, high		✓
20	BP assessment results – documents them, tells patient, explains if low, normal, high		✓
	LIFESTYLE	Not met ×	Met ✓
21	Establishes patient's lifestyle – asks about exercise, diet, smoking **and** alcohol		✓
22	Gives healthy lifestyle advice - advises patient to stop smoking		✓
23	Gives healthy lifestyle advice - explains health benefits (must mention at least 2 benefits: reduces BP, reduces risk of heart attack, reduces risk of cancer or other reasonable benefits)		✓
24	Gives tips to be more active (must mention at least 2 tips: choose a day to stop/cut down; get a friend to do it with you; planning rewards with money saved)		✓

Teething problems from first version

- gradescope couldn’t always read student names very well > pre-printed labels
- Two columns for ticks or crosses generated a lot of errors > reduced to one column and ticks only, leave blank if ‘not met’

Second version marking scheme - scanned



Please mark in pen

(2)

Student Name: [redacted]

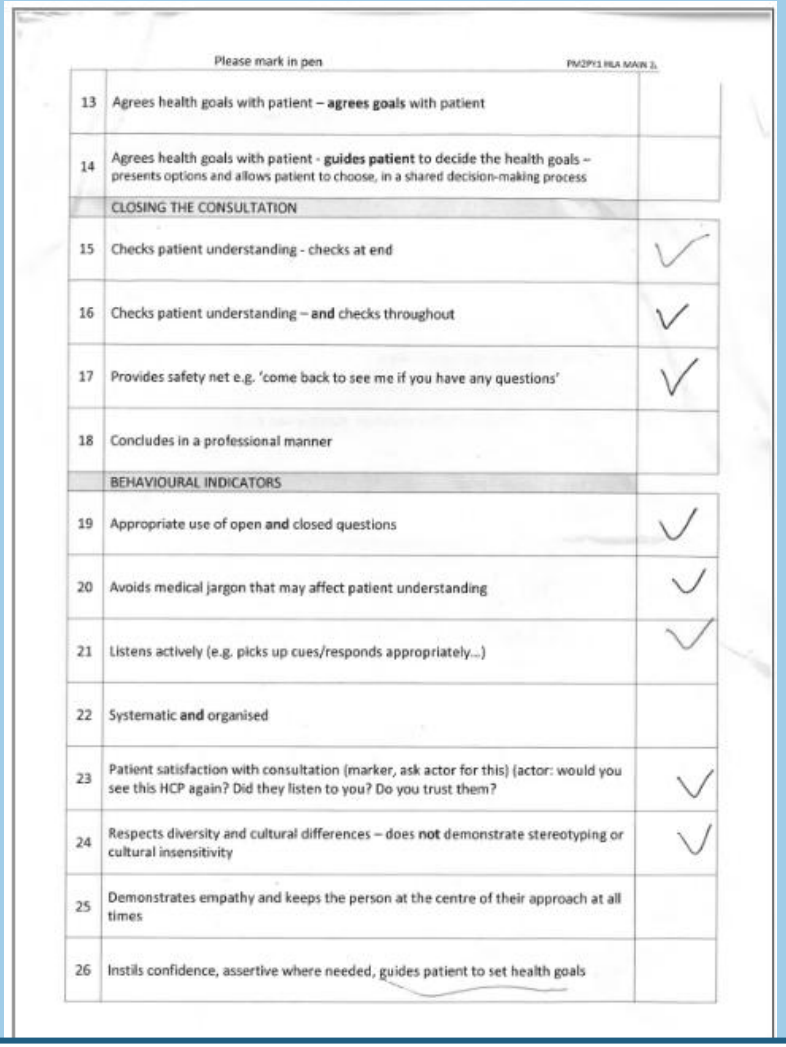
Marker: [redacted]

Date: 22/[illegible]/2026

ox only if the student blank if not achieved.

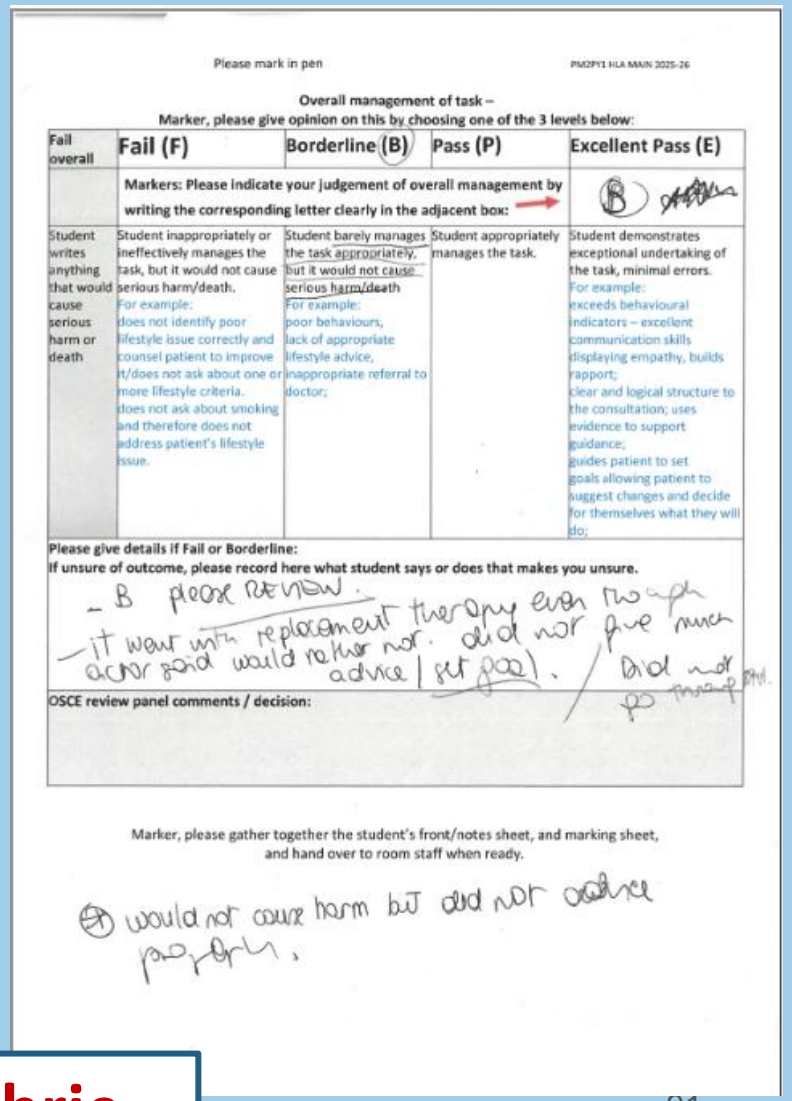
		Met ✓
	OPENING THE CONSULTATION	
1	Appropriate introduction - name	✓
2	Appropriate introduction - role	✓
3	Checks name **and** DoB **and/or** addr	✓
4	Explains the rest of the assessment to the customer- purpose **and** what is involved	
5	Gains consent from patient – verbal (please double check)	✓
6	Asks customer if they have any ideas, concerns or expectations from the consultation	
	DISCUSSION OF RESULTS	
7	BMI assessment results –tells patient, explains it is normal, mentions maintaining good habits (must do all 3)	
8	BP assessment results, tells patient, explains it is normal, mentions maintaining good habits (must do all 3)	
	LIFESTYLE	
9	Establishes patient's lifestyle – asks about exercise, diet, smoking **and** alcohol	✓ ✓ ✓ ✓
10	Gives healthy lifestyle advice – **focuses discussion on patient stopping or reducing smoking** high inspired main issue is smoking. explained risks.	
11	Gives healthy lifestyle advice - **explains health benefits** (must mention **at least 2**): reduces BP, reduces risk of heart attack, reduces risk of cancer or other reasonable benefits.	✓
12	Gives tips on **how to reduce/stop smoking** (must mention **at least 2**): choose a day to stop/cut down; get a friend to do it with you; planning rewards with money saved or other reasonable tips.	

review please



Please mark in pen PM2PY1 HLA MAIN 2

13	Agrees health goals with patient – **agrees goals** with patient	
14	Agrees health goals with patient - **guides patient** to decide the health goals – presents options and allows patient to choose, in a shared decision-making process	
	CLOSING THE CONSULTATION	
15	Checks patient understanding - checks at end	✓
16	Checks patient understanding – **and** checks throughout	✓
17	Provides safety net e.g. 'come back to see me if you have any questions'	✓
18	Concludes in a professional manner	
	BEHAVIOURAL INDICATORS	
19	Appropriate use of open **and** closed questions	✓
20	Avoids medical jargon that may affect patient understanding	✓
21	Listens actively (e.g. picks up cues/responds appropriately...)	✓
22	Systematic **and** organised	
23	Patient satisfaction with consultation (marker, ask actor for this) (actor: would you see this HCP again? Did they listen to you? Do you trust them?	✓
24	Respects diversity and cultural differences – does **not** demonstrate stereotyping or cultural insensitivity	✓
25	Demonstrates empathy and keeps the person at the centre of their approach at all times	
26	Instils confidence, assertive where needed, guides patient to set health goals	



Please mark in pen PM2PY1 HLA MAIN 2025-26

Overall management of task –

Marker, please give opinion on this by choosing one of the 3 levels below:

Fail overall	Fail (F)	Borderline (B)	Pass (P)	Excellent Pass (E)
	Markers: Please indicate your judgement of overall management by writing the corresponding letter clearly in the adjacent box: →			B
Student writes anything that would cause serious harm or death	Student inappropriately or ineffectively manages the task, but it would not cause serious harm/death. For example: does not identify poor lifestyle issue correctly and counsel patient to improve it/does not ask about one or more lifestyle criteria. does not ask about smoking and therefore does not address patient's lifestyle issue.	Student barely manages the task appropriately, but it would not cause serious harm/death For example: poor behaviours, lack of appropriate lifestyle advice, inappropriate referral to doctor;	Student appropriately manages the task.	Student demonstrates exceptional undertaking of the task, minimal errors. For example: exceeds behavioural indicators – excellent communication skills displaying empathy, builds rapport; clear and logical structure to the consultation; uses evidence to support guidance; guides patient to set goals allowing patient to suggest changes and decide for themselves what they will do;

Please give details if Fail or Borderline:

If unsure of outcome, please record here what student says or does that makes you unsure.

- B please review.
- it went into replacement therapy even though actor said would rather not. did not give much advice | set goal). Did not prompt

OSCE review panel comments / decision:

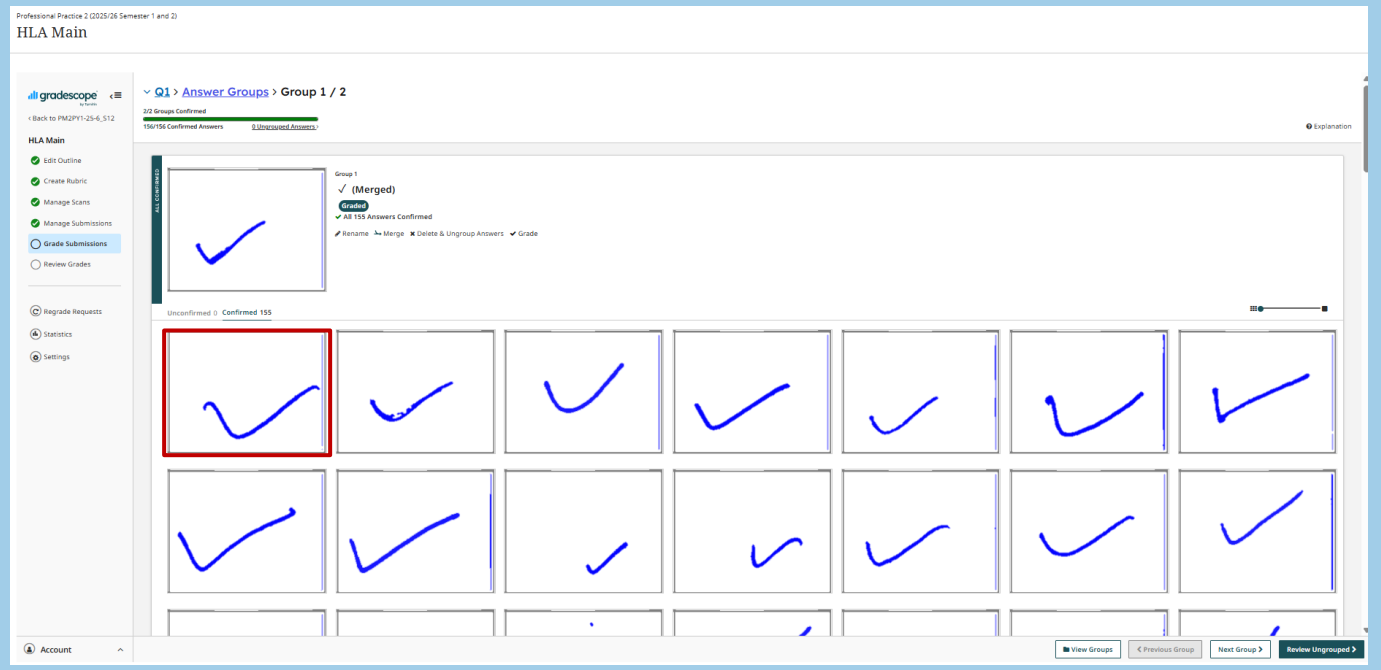
Marker, please gather together the student's front/notes sheet, and marking sheet, and hand over to room staff when ready.

B would not cause harm but did not advise properly.

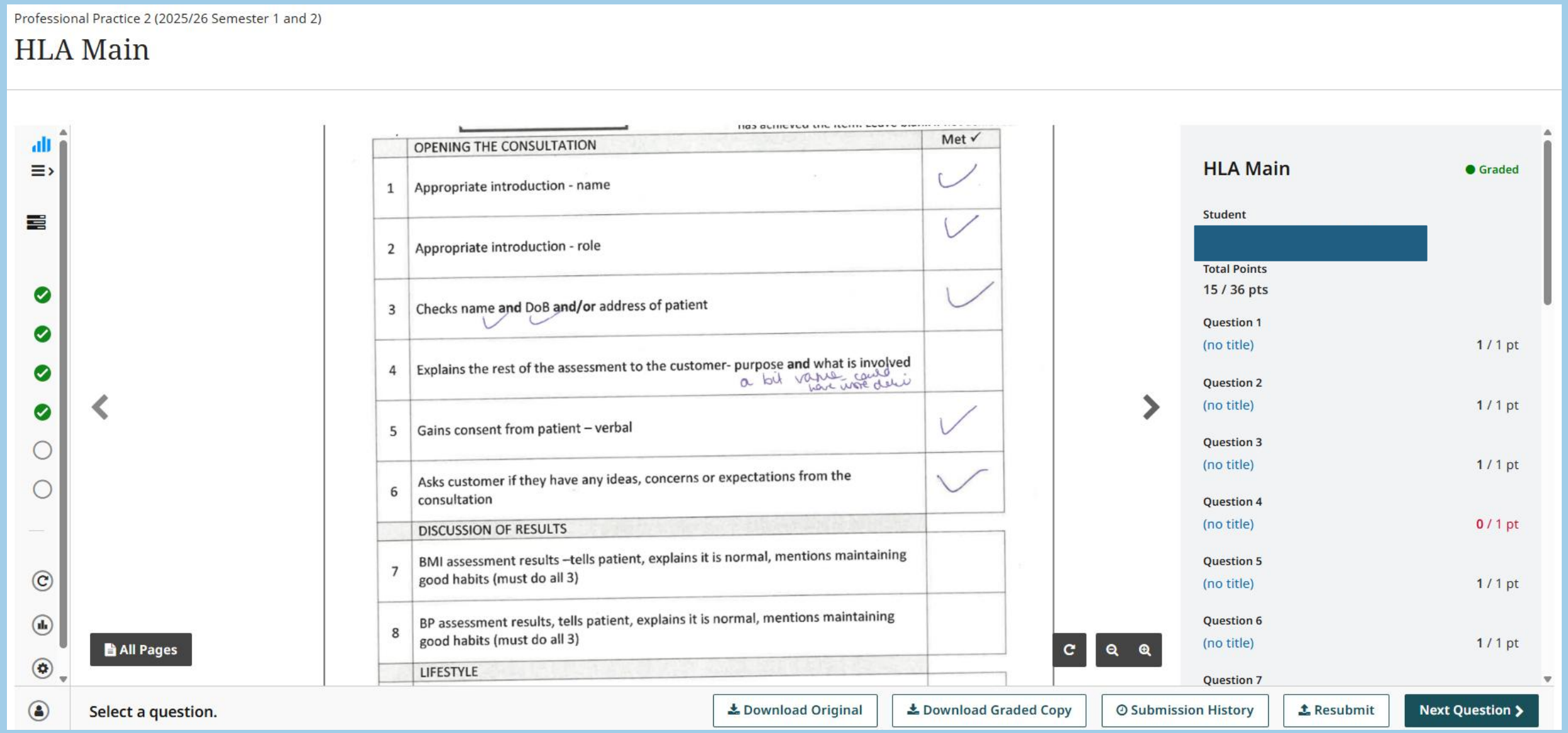
Example of pre-set field for rubric

What does gradescope do?

- ‘reads’ pre-set rubric fields on scans
  - Student name is matched to pre-loaded cohort list
  - Each field on marking scheme is ‘read’
  - Uses AI to cluster answers for each item
  - Clusters are checked manually, same contents are merged resulting in one group for ‘met’ and one group for ‘not met’ and mark assigned (‘grading’)



Single script after ‘grading’



Moderation

- Marks can be edited on gradescope
- Comments can be added

Reports – overall performance

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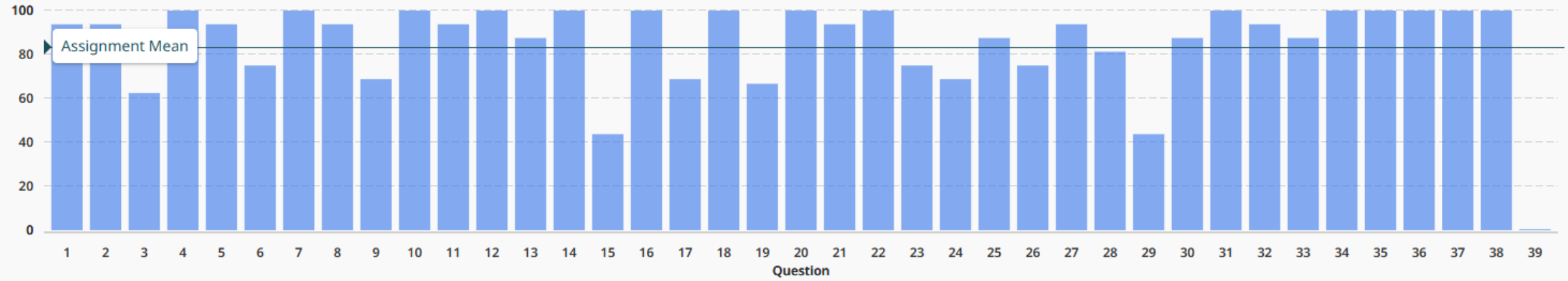
Assignment Statistics

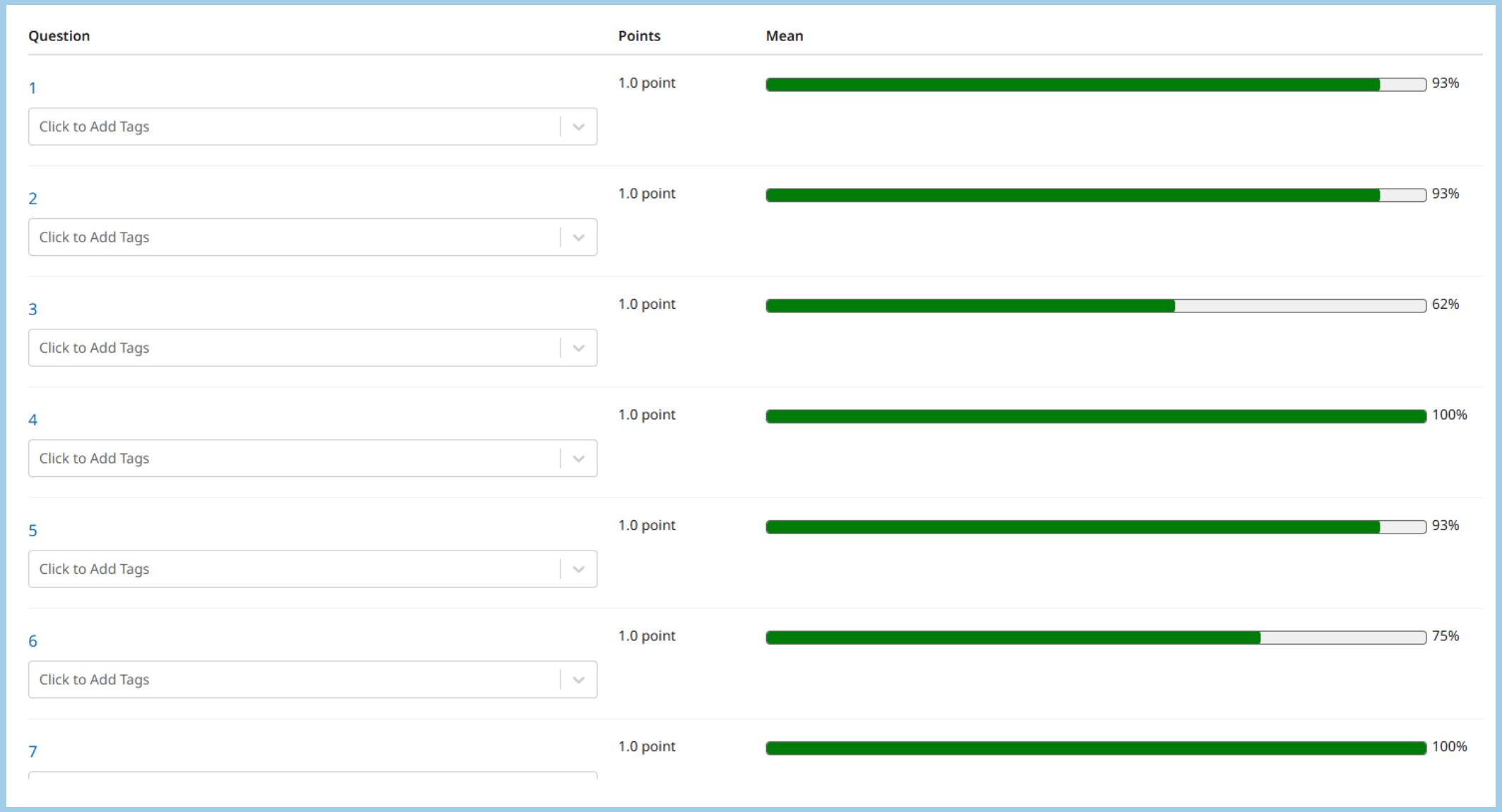
Show Questions | Show Tags



PM2PY1 S2 OSCEs HLA Station RESIT 50.0 points

Minimum	Median	Maximum	Mean	Std Dev
62.0%	85.0%	90.0%	83.0%	8.39%

Reports – individual items



Question	Points	Mean
1	1.0 point	93%
Click to Add Tags		
2	1.0 point	93%
Click to Add Tags		
3	1.0 point	62%
Click to Add Tags		
4	1.0 point	100%
Click to Add Tags		
5	1.0 point	93%
Click to Add Tags		
6	1.0 point	75%
Click to Add Tags		
7	1.0 point	100%

Benefits of using gradescope

- Scanning of scripts – no longer need to keep track of paper marking schemes once scanned
- Access scans from anywhere, makes moderation easier
- Easier to release to students during feedback sessions
- Download marks on spreadsheets, no manual data entry
- Generation of stats
  - Can identify areas where students are missing marks to tailor teaching sessions and provide support

Feedback from colleagues

"Digital record keeping allows us to give feedback online"

"…it reduces the risk of human error with calculations [of marks]"

"The statistics [makes it] easy to see where students… lost marks – this is useful when planning OSCE prep sessions"

"The best advantage for me was the statistics… I could see... how well the students [perform] in each question which is [really useful for feedback]"

"It saves a lot of time and makes marking and moderating more efficient!"

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Drawbacks of using gradescope

- Currently using more paper
- Occasional symbol recognition errors

Next steps

- Explore fully digital on-screen marking

Conclusions

- Gradescope can be successfully adapted for OSCE marking
- Staff training was minimal
- Administrative burden was reduced
- Moderation and feedback processes were improved
- Further work will explore fully digital marking

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Any Questions?

RUTGERS HEALTH
Ernest Mario School of Pharmacy

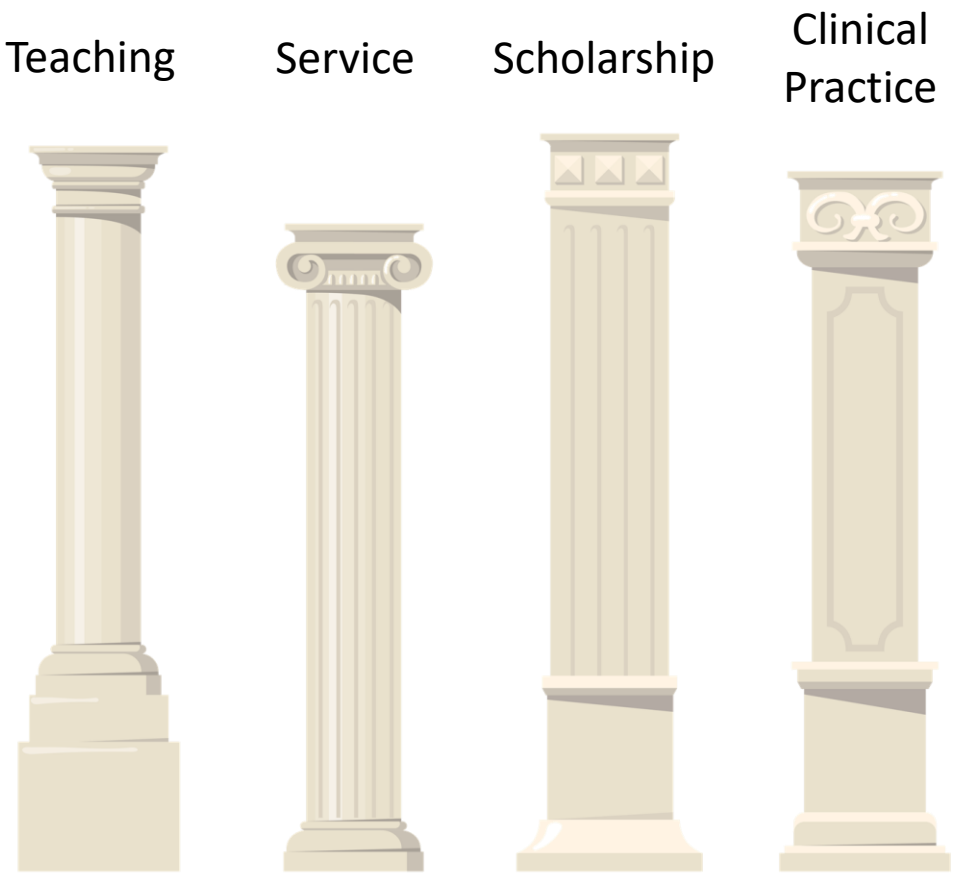
Hidden Hours: National Survey of Time Spent in Preparation of Course Materials Among US Pharmacy Faculty

Authors: Jimmy Gonzalez, PharmD, MPH; Belinda Zhang, PharmD; Joseph Barone, PharmD; Luigi Brunetti, PharmD, PhD; Rupal Mansukhani, PharmD; Deepali Dixit, PharmD; Anita Siu, PharmD

Presenter: Jimmy Gonzalez, PharmD, MPH

Background

- Faculty workload in pharmacy schools consists of a complex balance of teaching, research, service, administrative, and clinical practice responsibilities.
- Teaching includes both didactic teaching and experiential instruction.
- There is a lack of formal documentation to calculate faculty instructional labor.
- A pilot study conducted at Rutgers University's Ernest Mario School of Pharmacy (EMSOP) found faculty members spend ~10 hours creating and revising their lecture materials.
- This study expanded the pilot survey to a national scale to evaluate pharmacy faculty workload in the U.S.



Designed by pch.vector. http://www.freepik.com

Park SK, et al. *Am J Pharm Educ.* 2023;87(2):ajpe9012.
Cruz CF, et al. *Curr Pharm Teach Learn.* 2024;16(12):102182.
Lebovitz L, et al. *Am J Pharm Educ.* 2023;87(5):100033.

Pilot Study at EMSOP

Most commonly reported time spent on preparing a new didactic lecture:		
50–75-minute lecture = 7-8 hours	≥76-minute lecture = ≥15 hours	
Most commonly reported time spent on preparing new lab material:		
Skills lab = 3-4 hours	Simulation lab = 3-6 hours	Compounding lab = ≥15 hours
Average time spent creating annual updates:		
Skills/Compounding labs = 1-2 hours	Didactic lectures and simulation labs = 3-4 hours	
Average weekly time spent completing administrative related responsibilities:		
3-4 hours		

Siu A, et al. [Data on File]. Ernest Mario School of Pharmacy. 2023.

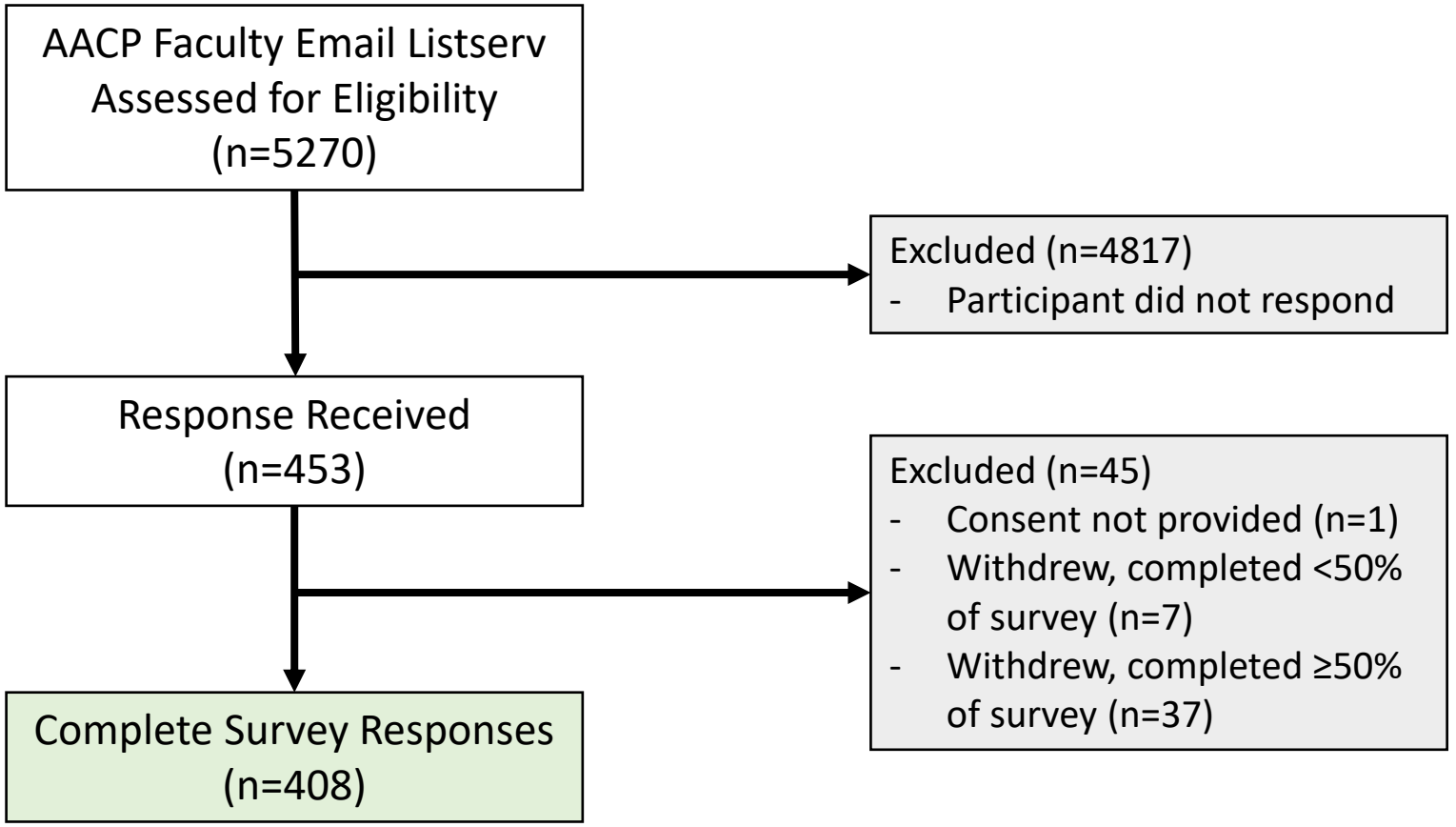
Methods

Survey Questionnaire

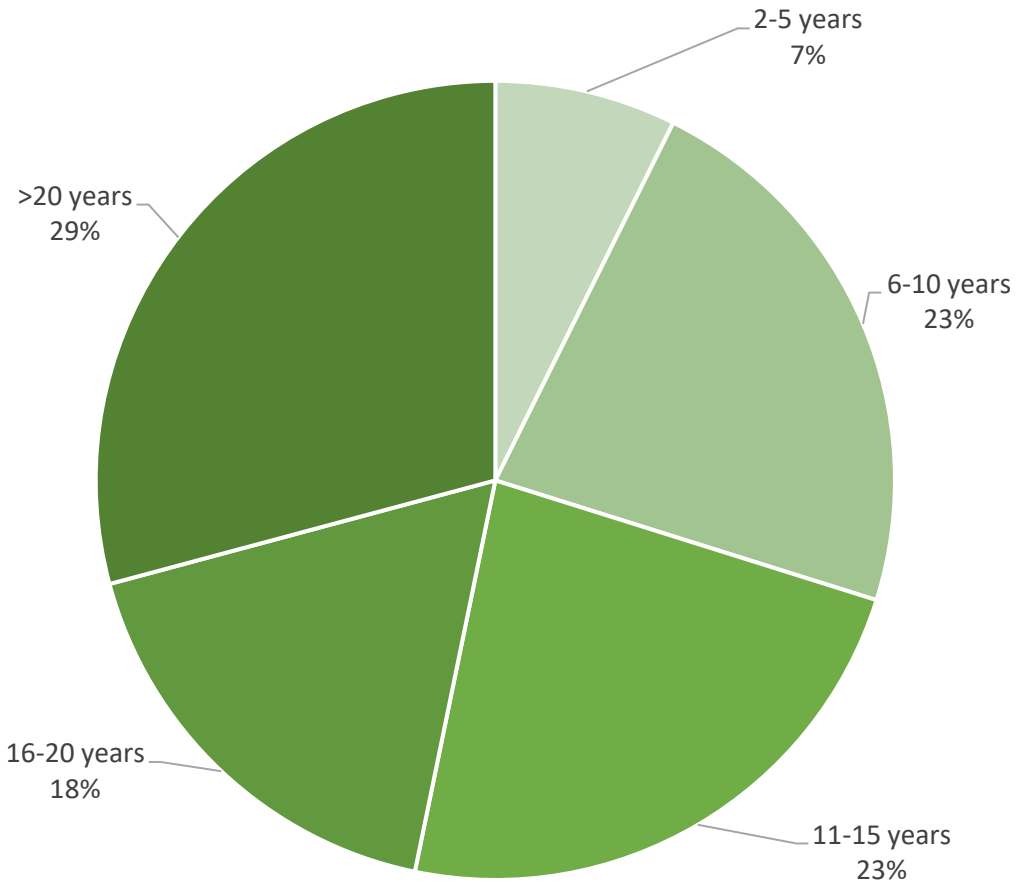
- Qualtrics survey distributed electronically to US pharmacy faculty
  - Target population: pharmacy faculty employed at ACPE-accredited schools of pharmacy with membership in the AACP faculty email listerv
  - 30-question-long questionnaire estimated to take 10 minutes to complete
- Survey open for 1 month (3 Sept 2025 to 1 Oct 2025)
  - Two reminder emails sent at week 2 and week 4
- Sample size for power estimated at 362
  - Assuming 95% confidence, 5% margin of error, population size of 6125 (using 2024-2025 AACP estimate)
  - **Note**: prior studies documented response rates of 10-15% using similar methods

Qualtrics. Sample size calculator. Available from: https://www.qualtrics.com/articles/strategy-research/calculating-sample-size/.

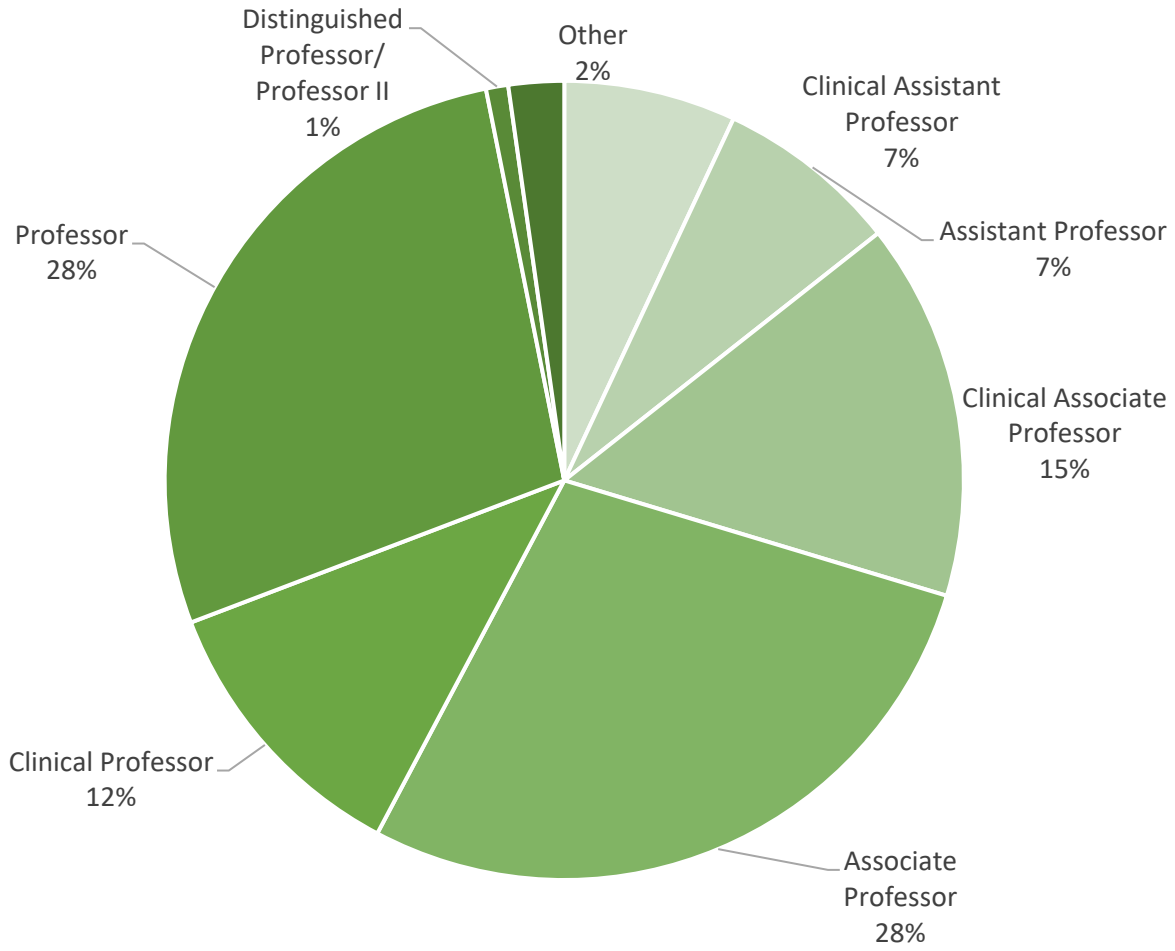
Results - Enrollment



Results - Demographics

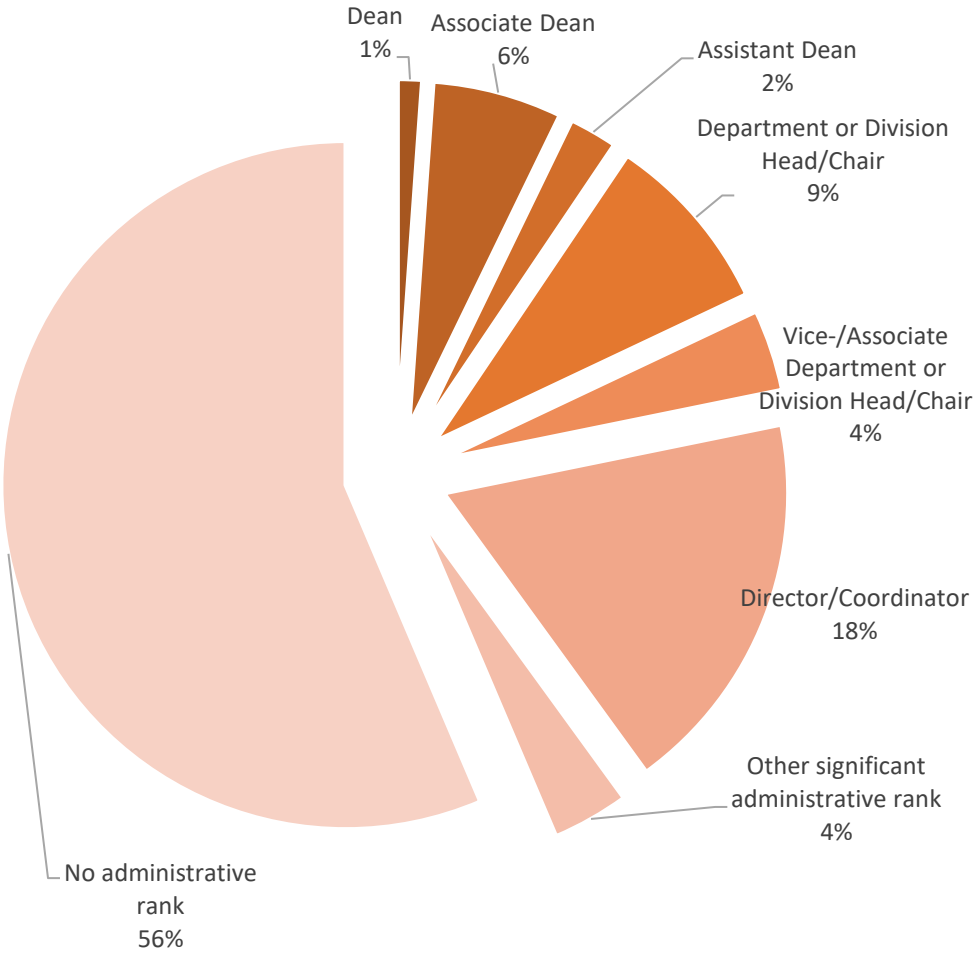


Years in Practice

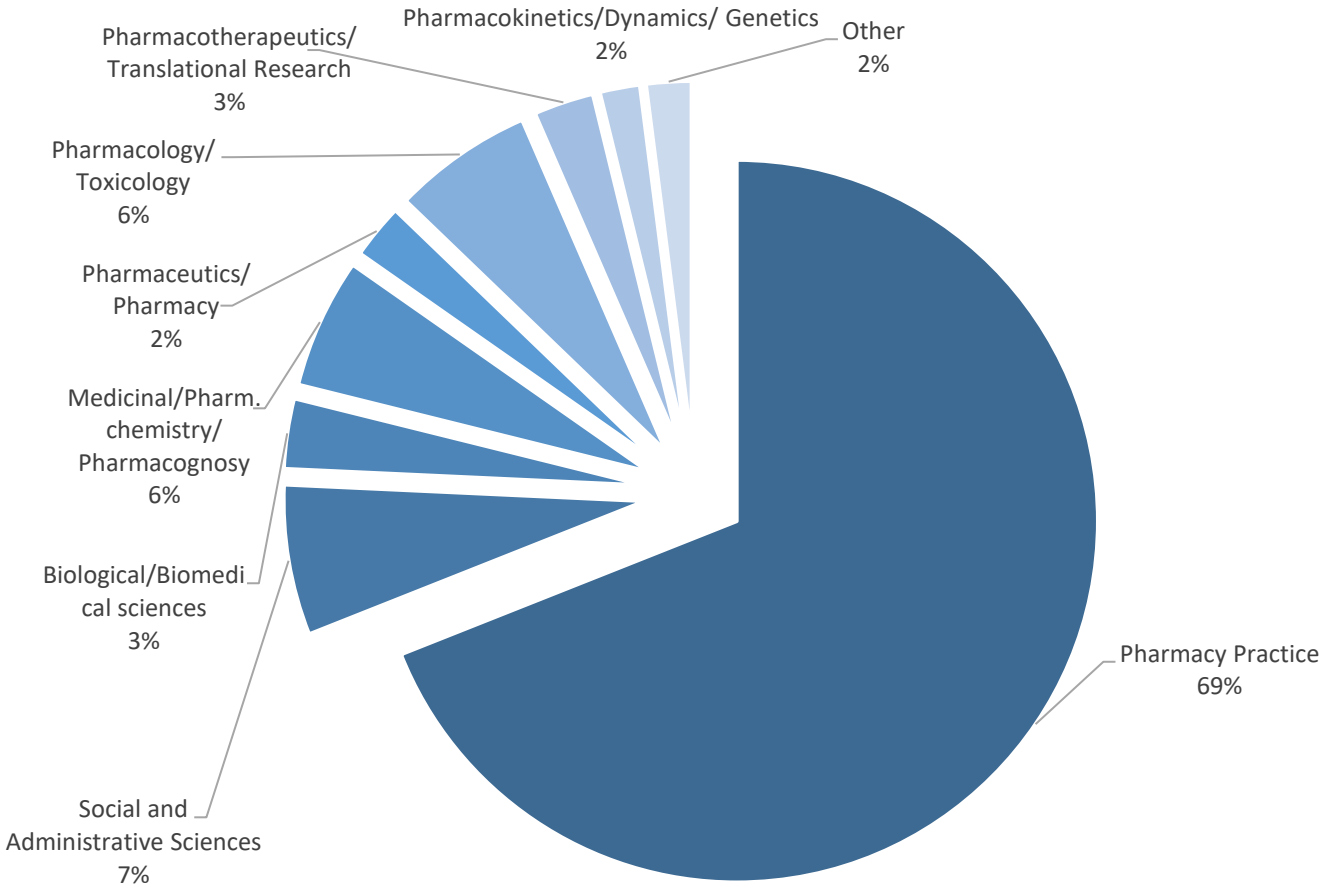


Distribution in Academic Rank

Results - Demographics

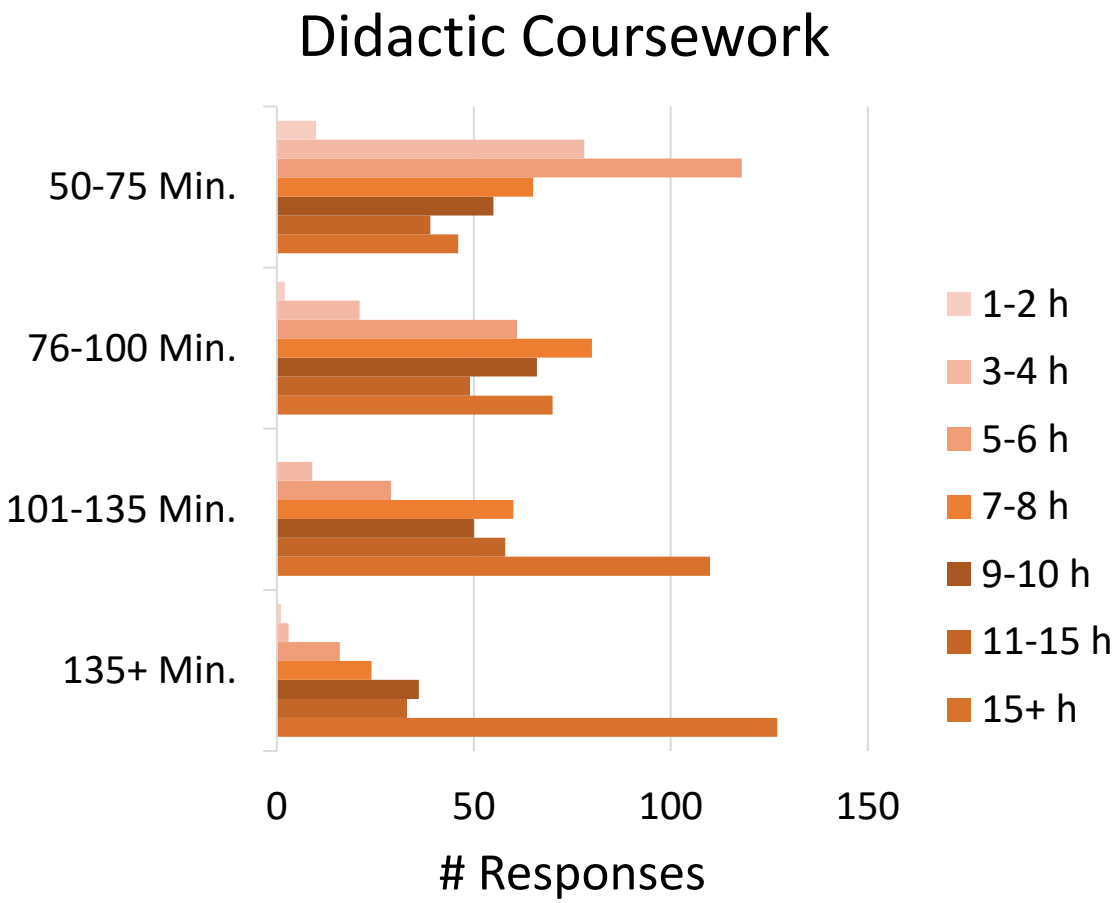


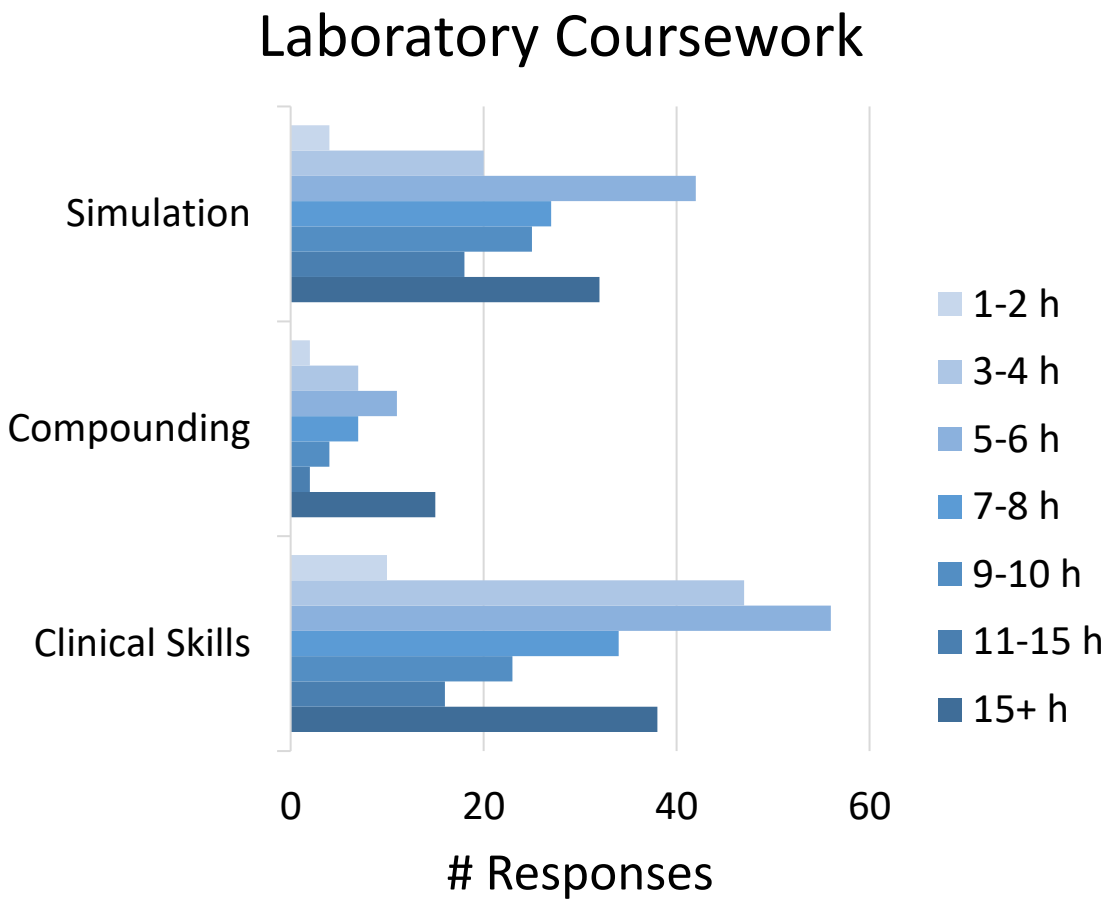
Distribution in Academic Rank



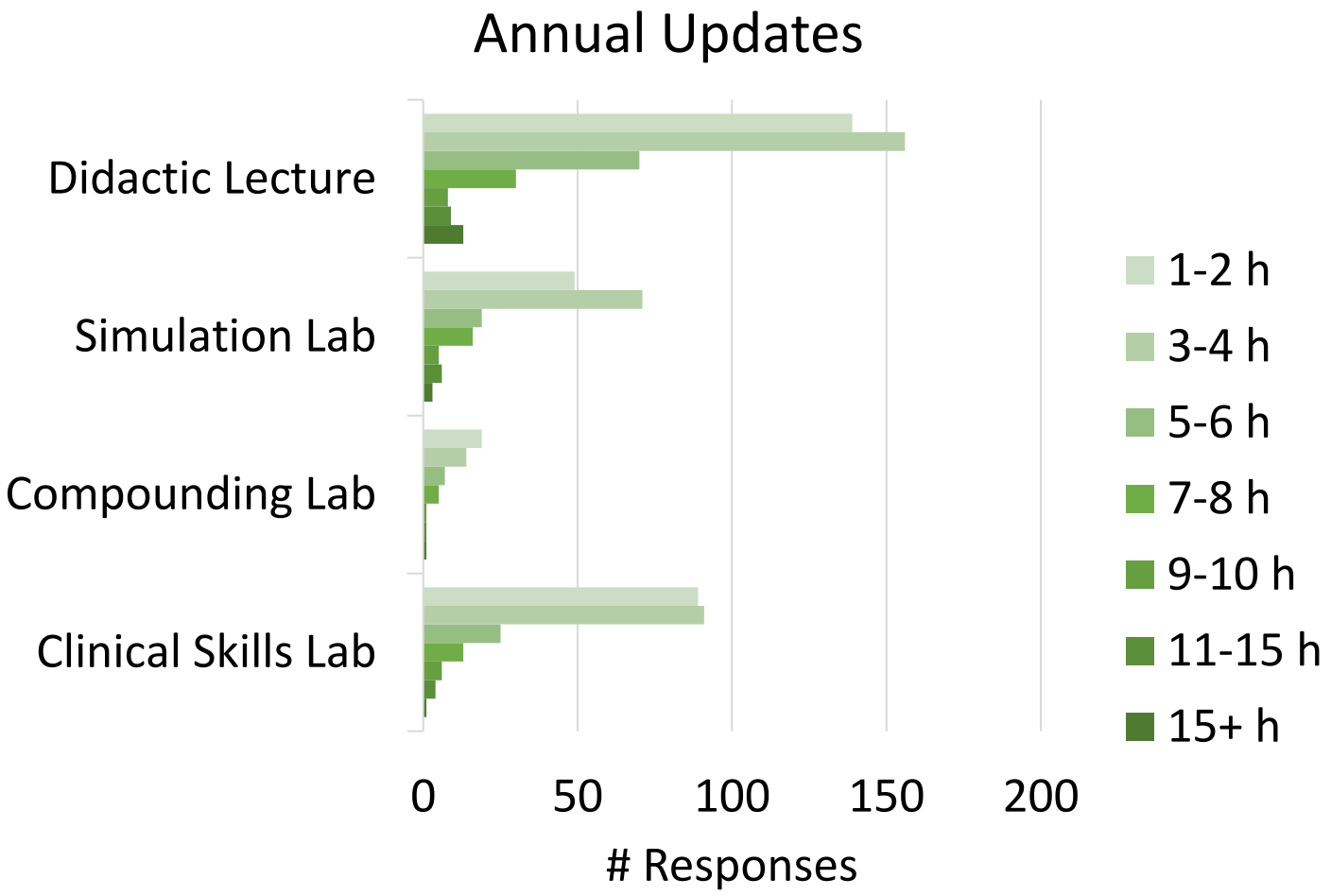
Departmental Distribution

Results - Preparation Times (New Class)





Results - Preparation Times



Overall Time Dedication

- Didactic
  - Slide prep (32.3%)
  - Reviewing literature (18.3%)
  - Summative assessments (15.8%)
  - Formative assessments (14.2%)
- Lab
  - Formative assessments (16.2%)
  - Prepping lab materials (11.7%)
  - Slide prep (7%)

Common Challenges

- Active learning (70.6%)
- Creating assessment questions (67.9%)
- Technology (58.3%)

Discussion

- Mostly representative of pharmacy practice departments (~70%)
- Preparation time scaled with duration of class; large distribution of responses among individual class times
- Most common challenges involved active learning and assessment question creation

- Limitations
  - Response rate of 8.6% (though met power)
  - Self-reported data may not be reflective of true time taken
  - Reported preparation times did not account for the number of classes that each pharmacy faculty member teaches.

Conclusions

- Aggregate data can inform administrative workload assessment and/or personal development plans
- May serve as a benchmark or expectation for new and experienced faculty
- Highlights significant time contribution developing active learning and assessment

References

1. Park SK, DiVall MV, Lee KC, et al. Gaps and opportunities for faculty workload policies in pharmacy and health professions education. *Am J Pharm Educ.* 2023;87(2):ajpe9012.
2. Cruz CF dos S, Araújo DCSA de, Santos CT de J, Onozato T, et al. Effectiveness of teaching and evaluation methods of clinical competencies for pharmacy: A systematic review. *Curr Pharm Teach Learn.* 2024;16(12):102182. doi:10.1016/j.cptl.2024.102182
3. Lebovitz L, Park SK, Dey S, et al. Perceptions and practices for evaluating faculty workload by pharmacy education administration/leadership. *Am J Pharm Educ.* 2023;87(5):100033.
4. Griffith AS, Altinay Z. A framework to assess higher education faculty workload in U.S. universities. *Innov Educ Teach Int*. 2020;57(6):691-700.
5. Siu A, Dean S, Ghaderi S, et al. Survey at a school of pharmacy to determine time spent in preparation of course material [Data on File]. Ernest Mario School of Pharmacy. 2023.
6. Qualtrics. Sample size calculator. Available from: https://www.qualtrics.com/articles/strategy-research/calculating-sample-size/.

Acknowledgements

- Sarah Dean, PharmD; Juliet Petillo, PharmD; and Sara Ghaderi, PharmD for their work on the initial pilot study at EMSOP.

- Dean Barone and EMSOP for support and guidance on this project.

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