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# THE EFFECTIVENESS OF A VIRTUAL PRESCRIBING COURSE FOR FINAL YEAR MEDICAL STUDENTS PREPARING FOR THE PRESCRIBING SAFETY ASSESSMENT

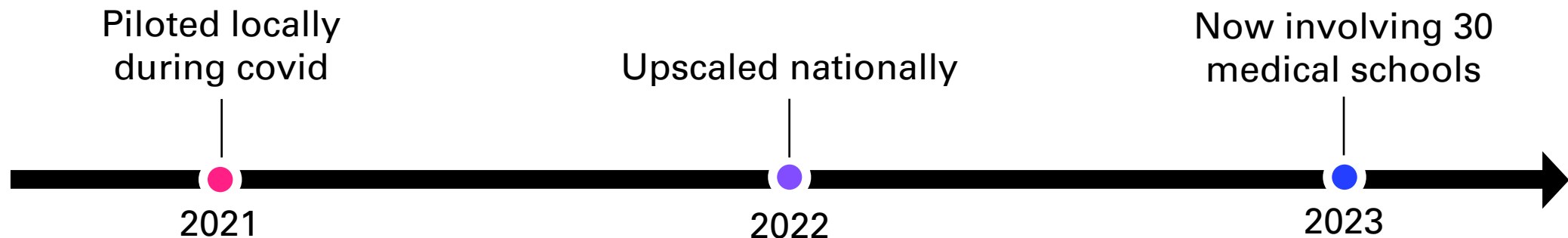
Leading for the Future Conference

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# Background

- The Prescribing Safety Assessment (PSA) is a national exam sat by final year medical students<sup>[1]</sup>
- Students report feeling underprepared both for the PSA<sup>[2]</sup> and when they start prescribing as foundation doctors<sup>[3]</sup>, in whom the GMC found an 8.9% prescribing error rate<sup>[4]</sup>
- To help students feel more prepared we designed and ran a free virtual prescribing course called 'Prepare for the PSA'



# Aims and objectives

- The **aim** was to investigate the effectiveness of the course in preparing students for the PSA
- The **objectives** were to:
  1. Collect quantitative data on self-reported preparation levels before and after the course
  2. Run a pre- and post-course test to assess the change in score after completion of the course
  3. Collect qualitative feedback about the course

# Methods

- Ran over two weeks in January 2023 prior to main exam sitting in a **live and recorded virtual format**
- Advertised through medical schools, social media and word of mouth
- **Feedback collected** after each session and once students had received their results
- Students invited to participate in a **pre- and post-course test**
- Sessions **based around timed practice questions** formatted in the **style of the PSA** with **integrated finals revision, a mock exam and certificates**



# PREPARE FOR THE PSA

A FREE VIRTUAL COURSE AND MOCK EXAM FOR FINAL YEAR MEDICAL STUDENTS

## COURSE OVERVIEW

A free course of four sessions covering everything you need to know to pass the PSA. Run by two junior doctors who have recently sat the exam themselves. Based around practice questions with excellent feedback received for the last two years.

*"The best PSA course I've attended"*

*"Everything was delivered in a clear and concise way with so many useful tips"*

## WHY ATTEND

- Sessions via Microsoft Teams
- Understand the question breakdown and how to maximise your mark
- Integrated finals revision
- Over 100 practice questions in the style of the PSA
- Powerpoints and certificates available
- Sessions recorded to rewatch
- Complete mock exam with answers

## WHEN IS IT

- 13/01/23 17:00 - PSA breakdown / CAL
- 19/01/23 17:00 - PWS with finals revision along the way
- 23/01/23 18:00 - Tips and tricks to navigate the BNF / REV
- 25/01/23 18:00 - Everything else (MAN, COM, ADR, TDM, DAT) / Mock exam info

## HOW TO JOIN



Scan the QR code to find us on Facebook. We will post updates and links to join each session here.

Alternatively, please email [prepareforthe psa@gmail.com](mailto:prepareforthe psa@gmail.com) to get in touch and register your interest.



Clare Bartholomew @iamclarebart · Dec 15, 2022



Excited to run Prepare for the PSA again in January! A free virtual course for final year medical students with integrated finals revision. Find us on Facebook for more info!



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## Prepare for the PSA

Private group · 1.8K members

Join Group



About

Discussion

**Case presentation**

A 60-year-old woman is admitted to hospital with a 2 day history of left calf pain. She recently returned to the UK after a long haul flight from Hong Kong.

**DH.** Paracetamol 1 g PO 6-hrly.

**On examination**

Left calf tender and swollen compared with the right calf (measured 10 cm below the tibial tuberosity). Mild pitting oedema around the left ankle. Weight 60 kg.

**Investigations**

INR 1.0 (<1.4).

Doppler US scan confirms a DVT in the left popliteal vein.

89130

**Prescribing request**

Write a prescription for ONE drug that is *most appropriate* to treat her DVT. (use the 'hospital regular medicines' prescription form provided)

89130

**PRESCRIPTION FORM****Medicine**

**Dose**

**Frequency**

**Prescriber**

Clare Bartholomew

**Route**

**Duration**

continuous

**Date**

14/01/2021

89130

Official  
PSA past  
paper

**Case presentation**

A 59-year-old woman is reviewed for hypercholesterolaemia by her GP. **PMH.** Hypertension **DH.** Lisinopril 20mg PO once daily. **SH.** She eats a balanced diet, non-smoker.

**On examination**

Corneal arcus in both eyes. BP 132/84.

**Investigations**

Serum cholesterol 7.6mmol/L (<5.2), LDH cholesterol 5.50mmol/L (<3.36), HDL cholesterol 1.10mmol/L (>1.55), fasting serum triglycerides 1.90mmol/L (0.45-1.69). Her 10-year cardiovascular risk is estimated to be 24%.

**Prescribing request**

Write a prescription for ONE drug that is *most appropriate* to lower her cholesterol. (use the 'general practice' prescription form provided)

**PRESCRIPTION FORM****Medicine**

**Dose**

**Frequency**

**Prescriber**

Joe Bloggs

**Route**

**Duration**

28 days

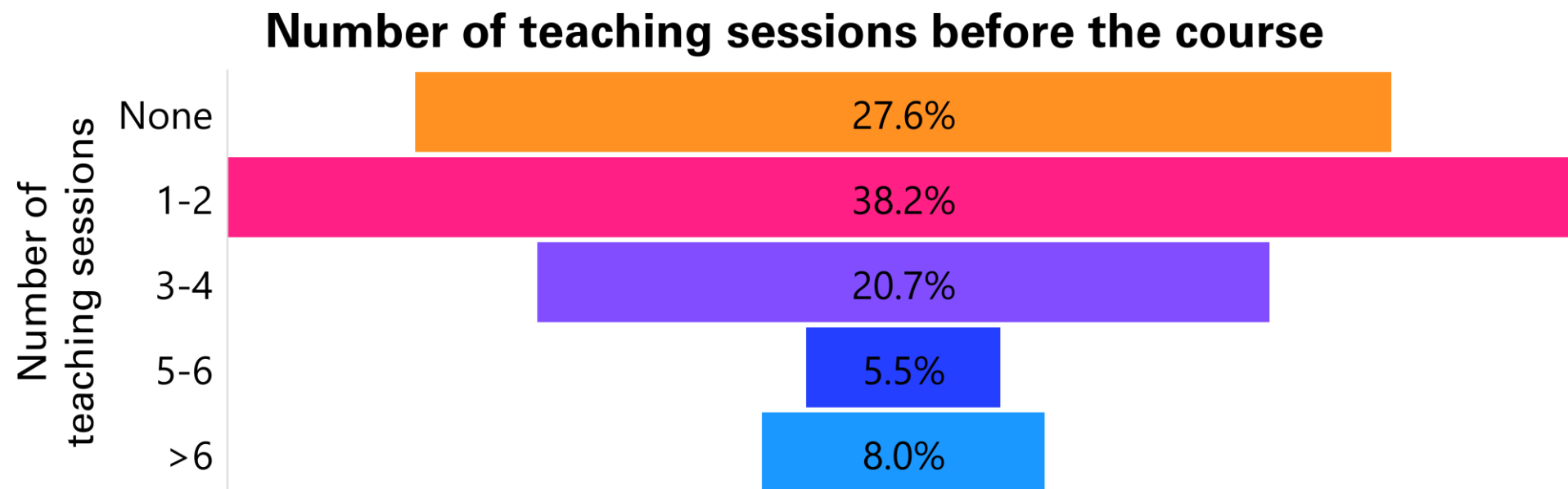
**Date**

01/01/2021

Prepare  
for the  
PSA

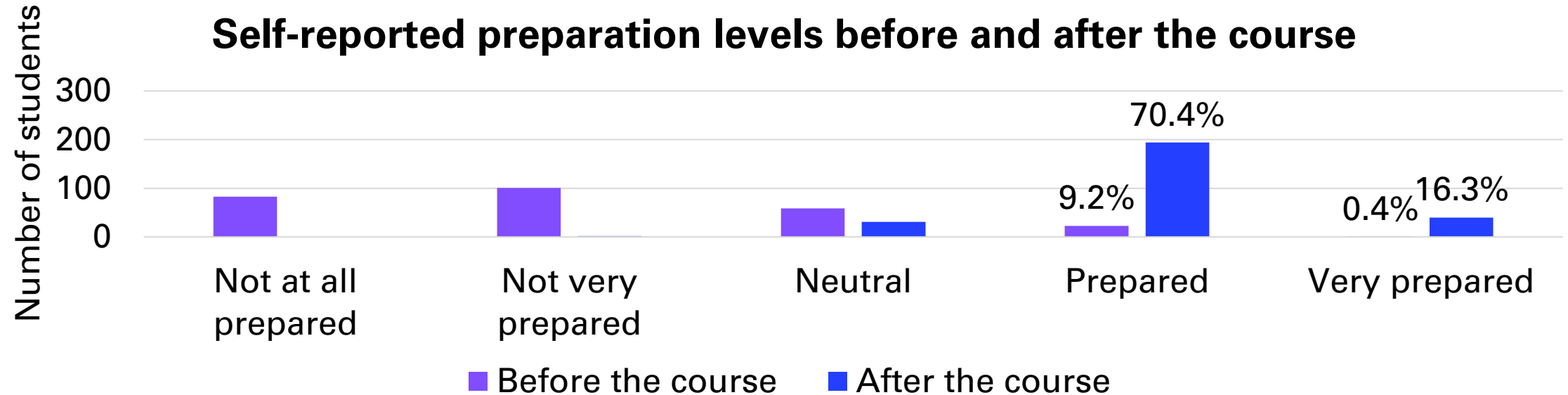
# Results

- Over 1000 feedback forms collected from students at 30 medical schools
- 63.4% heard about the course through word of mouth





# Quantitative analysis



- Students 'agreed' or 'strongly agreed' the course helped with their revision (95.3%), helped them to pass (95.9%) and improved their mark (90.3%)
- 100% passed the PSA with an average mark of 80.4%

# Pre- and post-course test

- 10 question (34 marks) pre- and post-course test completed by 20 students
- Normality assessed with Shapiro-Wilk then paired t-test applied
- Statistically significant increase in post-course test mark with pre-course mean 25.7 (SD 4.8) and post-course mean 30.6 (SD 2.7) ( $p < 0.001$ )

A word cloud featuring various positive adjectives and phrases. The words are arranged in a non-linear fashion, with some being significantly larger than others. The colors used include shades of blue, green, purple, and pink. The words are: explanations, dedicated, perfect, wonderful, advanced, clear, grateful, free, excellence, concise, fun, confident, invaluable, appreciated, fantastic, helpful, tips, accessible, inclusive, amazing, useful, structured, brilliant, tricks, worthwhile, prepared, good, consolidated, excellent, improved, overview, knowledgeable, comprehensive, systematic, organised.

# Qualitative analysis and feedback

Consistent feedback praised the **virtual delivery, interactive nature** and **mock exam**

- ✓ "The best revision tool for the PSA by far"
- ✓ "You make the PSA fun if I am allowed to say that!"
- ✓ "Everything was so brilliant...it was like a light had been turned on"
- ✓ "You've taught me more than I've learnt pouring for days over other resources"

# Key messages



Many students had limited teaching at medical school



The results show increased self-reported preparation levels and post-test scores in students completing the course



A virtual prescribing course appears to be a convenient and effective adjunct to undergraduate teaching

# Going forward

Journal  
paper

Run again in  
2024

Website

Instagram  
and Twitter

Recruit F1  
and  
pharmacist

# References

1. General Medical Council. Outcomes for Graduates. Available from: <https://www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/outcomes-for-graduates/outcomes-for-graduates> [Accessed 12th March 2022].
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3. Rothwell C, Burford B, Morrison J et al. Junior Doctors prescribing: enhancing their learning principle. *Br J Clin Pharmacol* 2012;73(2):194-202.
4. Dornan T, Ashcroft DM, Heathfield H, et al. 2009. An in depth investigation into the causes of prescribing errors by foundation trainees in relation to their medical education. EQUIP study.