

Supplementary Material

Perceptions of the effectiveness of using patient encounter data as an education and reflection tool in general practice training

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Registrar Feedback Report

Regional Training Organisation:

ReCEnT Registrar Identifier:

Registrar Term:

Encounter Period:

Introduction

Thank you for your participation in the ReCEnT project. This feedback report gives you information on your individual clinical encounters in comparison to

- aggregated registrar data,
- national GP clinical activity data and
- your previous terms (as applicable).

Data from previous rounds of the ReCEnT project have been aggregated as a comparison group, comprised of approximately three hundred ten thousand unique clinical encounters. National GP clinical activity data is derived from the BEACH (Bettering the Evaluation and Care of Health) program from their 2015-16 report. The BEACH program was co-ordinated by the Family Medicine Research Centre at the University of Sydney.

Using ReCEnT to Inform Learning

The clinical encounters of a general practitioner are a great catalyst for learning. The information contained within this report allows for reflection to aid continuous improvement of your clinical practice. There are a number of ways that you can use this information.

Self Reflection

The report gives you a current snapshot of your general practice consultation and management profile. Is your feedback consistent with what you expected? If not, why might this be?

Comparisons throughout your report allow you to compare your results with other similar registrars, Australian GPs and your previous training terms (where relevant).

What can you learn from these comparisons? ReCEnT is a reflective exercise, prompting self-reflection on your practice. It is not a benchmarking exercise. There is no 'correct' level of any variable in this report.

There are further questions throughout the report to prompt your reflection.

Discussion with your Supervisor

We strongly recommend that you discuss this report with your supervisor at a teaching session. For example, are your results similar or different from their own practice? Why might this be the case?

Critical Appraisal

Interpretation of this report requires consideration of a number of factors which may impact upon the results. For example, valid data was recorded for only 42 of your 60 encounters. Were these 42 encounters typical of your usual practice? If not, in what way? How might this affect your results? If your results are different to those of your peers, how much might be due to the 42 cases being unrepresentative? How much might be due to your practice demographics? How much might be due to your personal style or methods of practice? Thus, you need to critically appraise your results.

Actions

After self-reflection on these results, and discussion with your supervisor, you may have identified gaps in clinical experience or a need to refine some aspects of your practice. These should be documented on your learning plan.

Results

1. The Registrars

In comparison to the national GP population, the registrar participants in ReCEnT have very different demographics - just over a third of the registrars were male (38.1%), compared to 54.6% of established GPs. Over nine in ten were aged under 45 (94.1%) compared to 38.8% of the GP population.

2. The Patients

Overall, about 60.5% of patients seen by all registrars were female, compared to 56.6% in the national GP dataset. However, registrars saw a younger patient population - 30.2% of patients were under 25 (compared to BEACH 19.3%) and only 17.8% of patients were 65 and over (compared to BEACH 30.7%).

The mean age of your patients was 35.8 years. 59.5% of your patients were female.

For **all female** registrars, the mean patient age was 38.8 years and 66.6% of patients were female.

Figure 1 refers to the age-sex distribution of your patients in your current term compared to patients of **other female registrars**. The lines represent the age and sex distribution of patients for the registrar group (blue is male and red female) and your patients are represented by the bars.

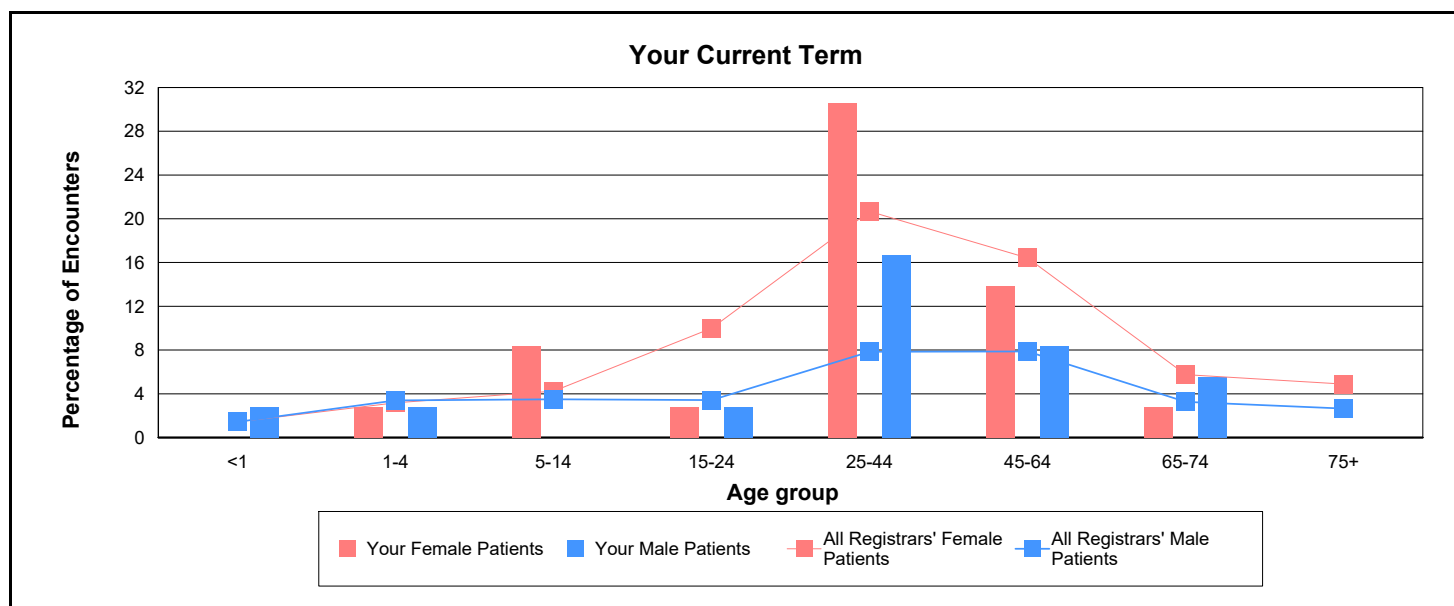


Figure 1. Demographics of patients for current training term

Reflective Questions

Did your patient demographics differ from your peers?

If so, why might this be? How might this affect your clinical exposure?

Aboriginal and Torres Strait Islander Patients

You saw 5 patients who identified as Aboriginal or Torres Strait Islander.

Reflective Questions

If you saw a patient who identified as Aboriginal and/or Torres Strait Islander:

Do you recall the patient and the presentation? Did the patient's Indigenous status influence your management?

Figure 2 refers to the age-sex distribution of your patients across all your terms, compared to patients of other female registrars.

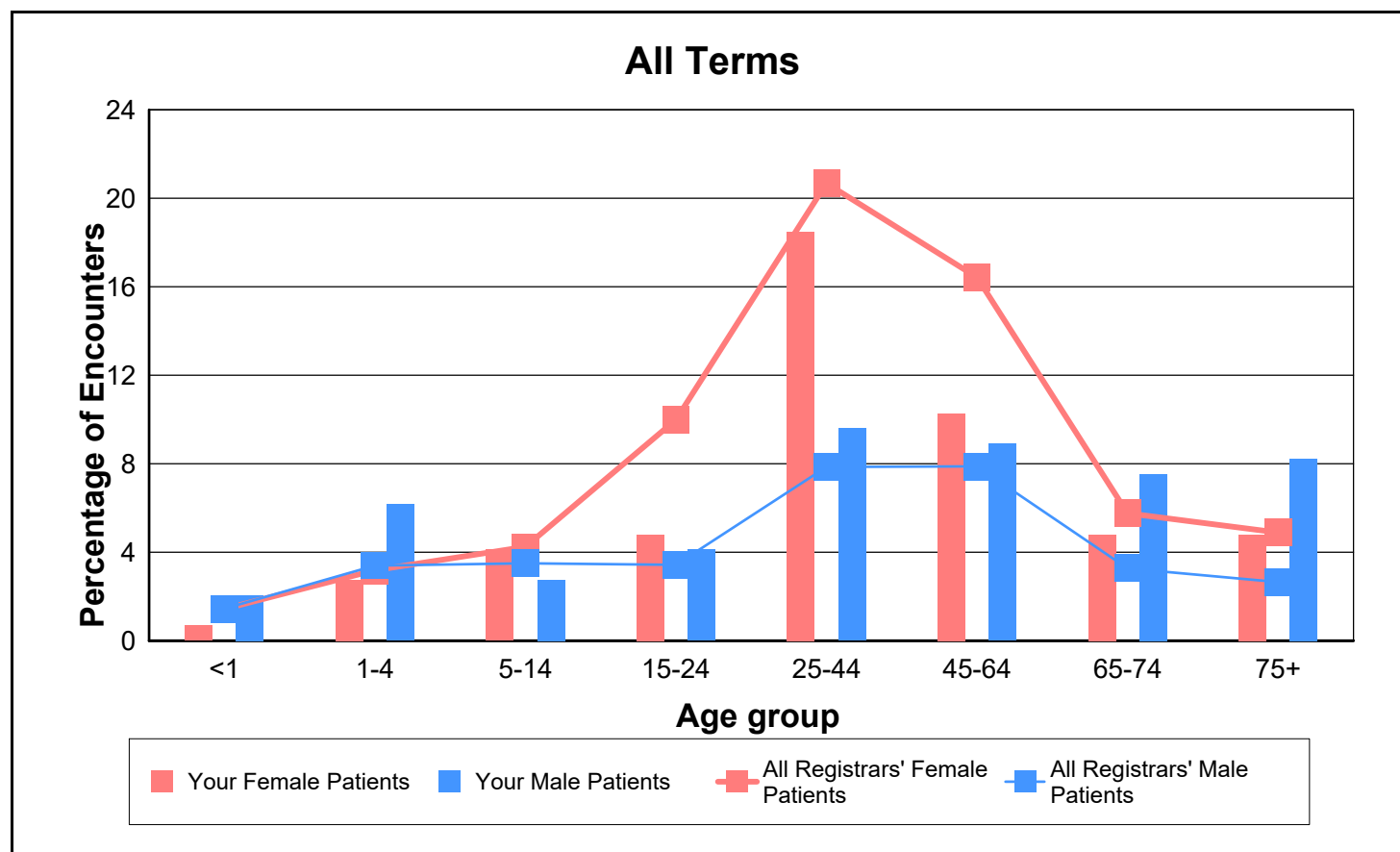


Figure 2. Demographics of patients from all training terms

3. The Encounters

3.1 Duration of Consultation

The mean duration for your consultations was 22.9 minutes. The mean duration for all Term 3 Registrars was 16.7 minutes. **Please interpret this data with caution as duration data was missing from more than 20% of your encounters.**

Figure 3 refers to the duration of your consultations compared to **all registrars in the same term as you**. The background shading represents the frequency of different consultation durations for the registrar group. Your consultations are represented by the bars.

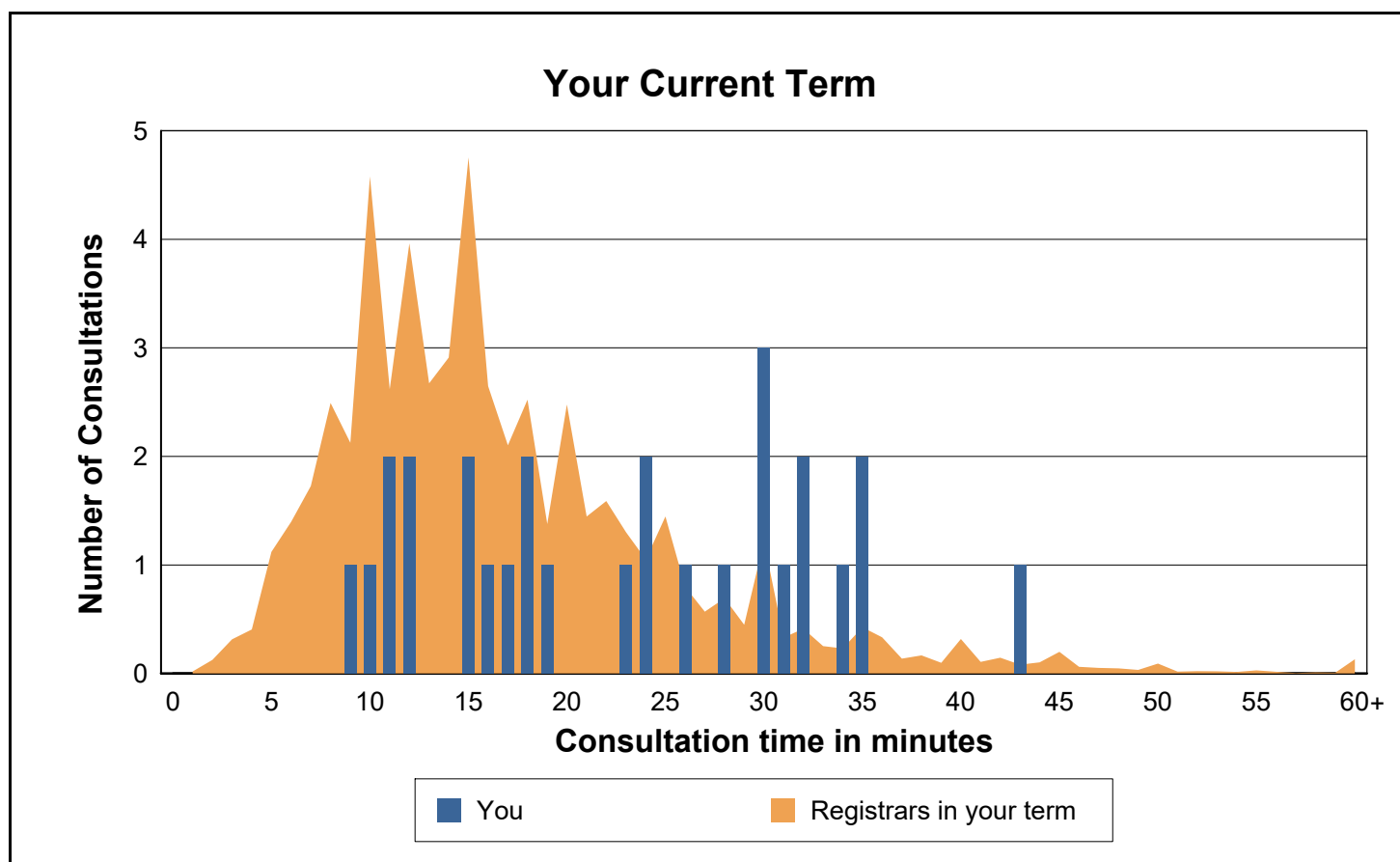


Figure 3. Consultation duration

Figure 4 below compares your mean duration of consultation with the mean duration of consultation for GP registrars by stage of training, and for GPs in the BEACH study.

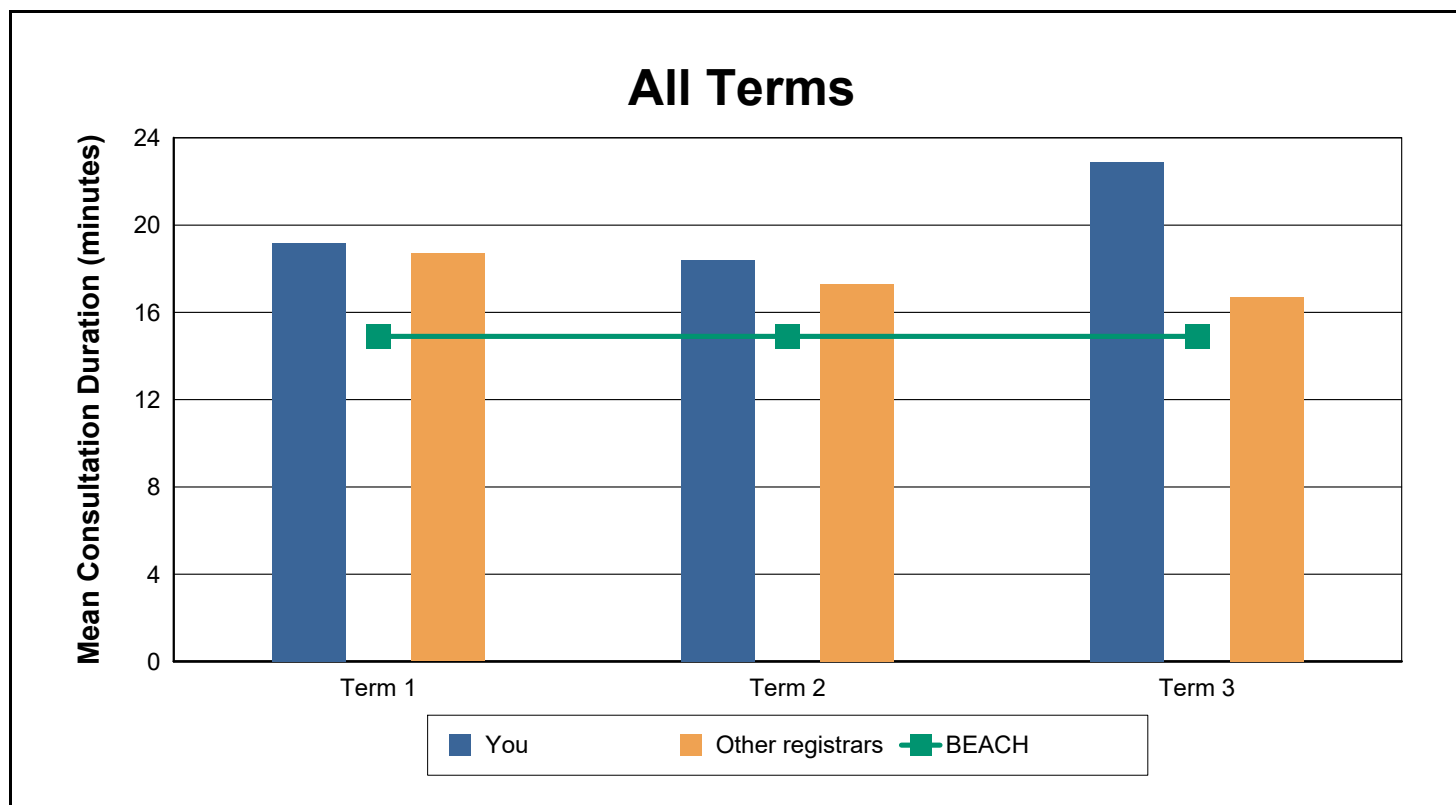


Figure 4. Average duration of consultation by stage of training

Reflective Questions

*Does your mean consultation duration, and spread of individual durations differ from your peers?
Has your mean duration of consultation changed with increasing experience?*

3.2 Continuity of Care

Continuity of care has been found to be closely related to patient and doctor satisfaction. Two aspects of continuity of care that the ReCEnT study captures are the proportion of new patients, and the percentage of encounters where follow-up was scheduled.

The proportion of patients that were new to you was 38.1%, compared to 59.4% for all registrars.

You scheduled patient follow-up with yourself in 45.0% of your encounters. The mean percentage of encounters for which all registrars scheduled patient follow-up with themselves was 46.7%.

Reflective Questions

What may be the implications of your continuity of care figures for your education and training?

3.3 Problems Managed

Number of Problems

Overall, registrars managed 156 problems per 100 encounters, or about 1.6 problems per consultation on average. This is almost exactly the same as BEACH data (154.3 problems per 100 encounters).

You managed 269.0 problems per 100 encounters.

Of all your problems managed, 17.7% were chronic disease. The mean for all registrars was 22.0%. This compares to 34.6% for established GPs.

Clinical Type

The top 5 most common specific ICPC-2 disease chapters managed by all registrars, by percent of total problems managed, were:

Respiratory (15.7%), General & Unspecified (15.4%), Skin (10.6%), Musculoskeletal (9.8%), Psychological (8.4%)

This compares to BEACH data (2015-16):

General & Unspecified (13.0%), Respiratory (12.7%), Musculoskeletal (11.7%), Skin (11.3%), Circulatory (9.8%).

Figure 5 refers to the types of problems you managed in your current term compared to **registrars of the same gender as you**.

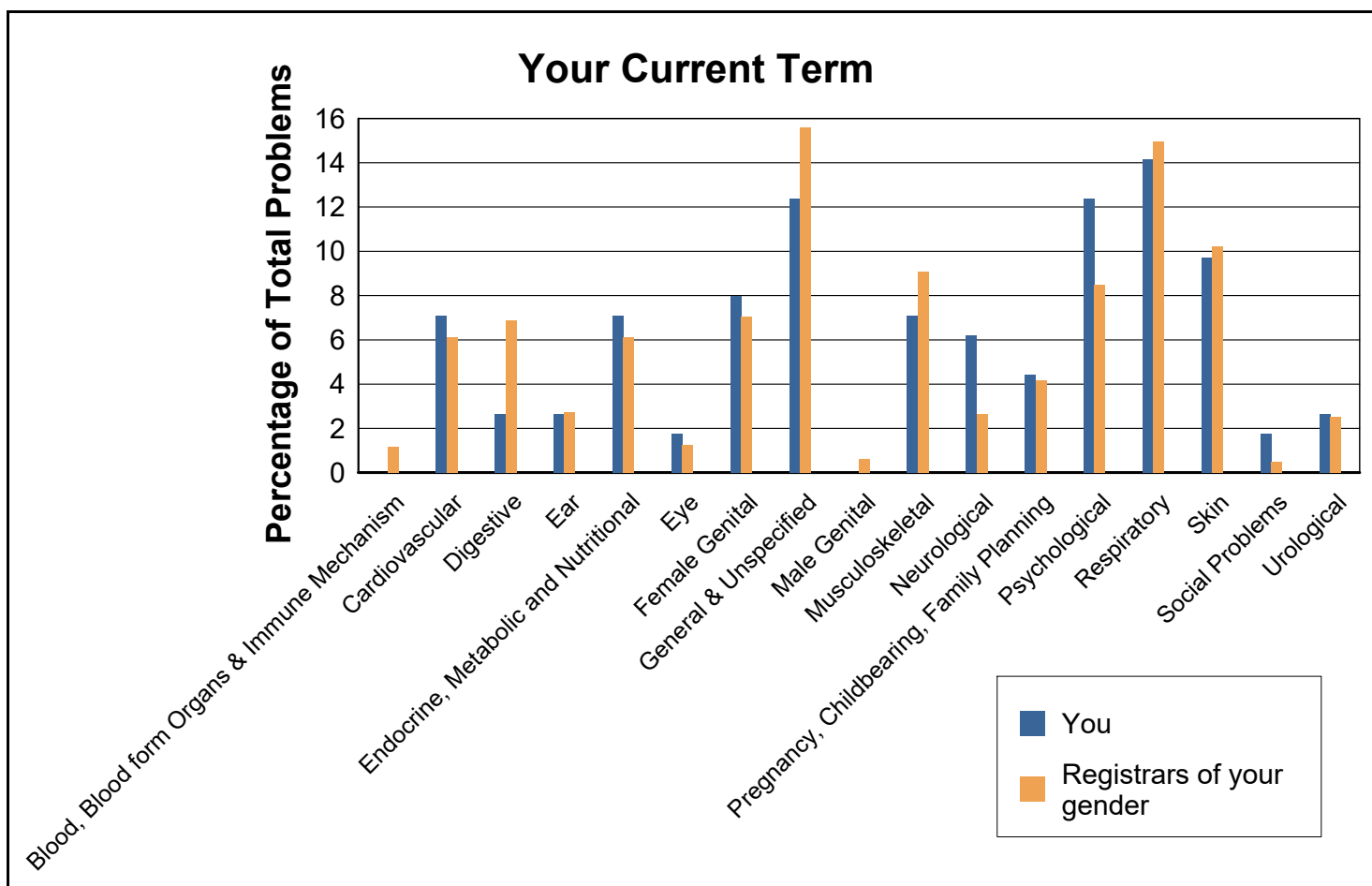


Figure 5. Frequency of problems managed by disease chapter heading for current term

Figure 6 refers to the types of problems you managed compared to registrars of the same gender as you during **all rounds** of ReCEnT you have completed.

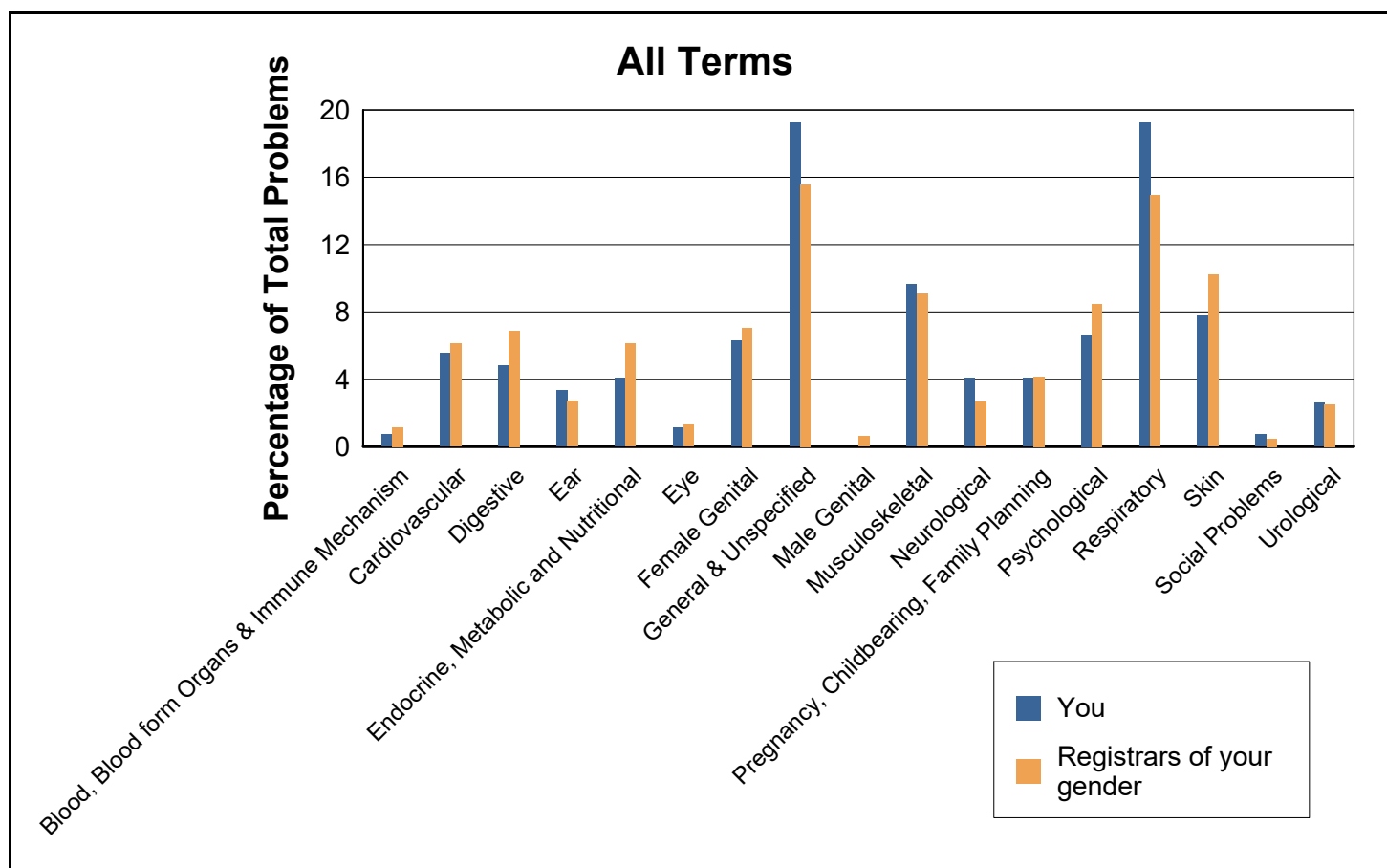


Figure 6. Frequency of problems managed by disease chapter heading cumulatively across all previous terms

Specific Problems Managed

Overall, the top ten problems managed by all registrars are below.

Problems Managed
1. Upper respiratory tract infection
2. Hypertension
3. Depression
4. Influenza immunisation
5. Gynaecological check-up
6. Anxiety
7. Asthma
8. Immunisation
9. Urinary tract infection
10. Renew medication

3.4 Investigations

At least one pathology test / battery of tests was ordered in 54.8% of your consultations, and at least one imaging test in 42.9%. This compares to 22.9% and 11.7% for all registrars and 18.4% and 9.4% in the BEACH data respectively.

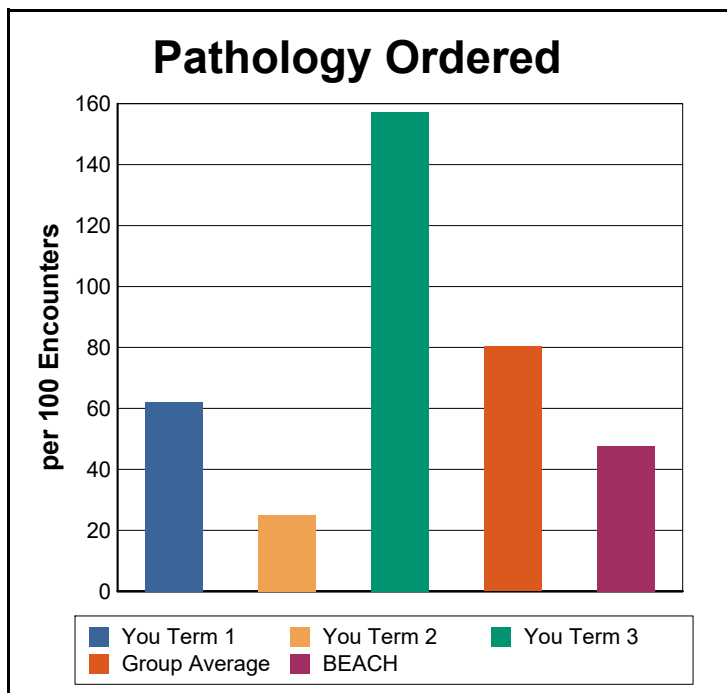


Figure 7. Pathology ordered (rate per 100 encounters)

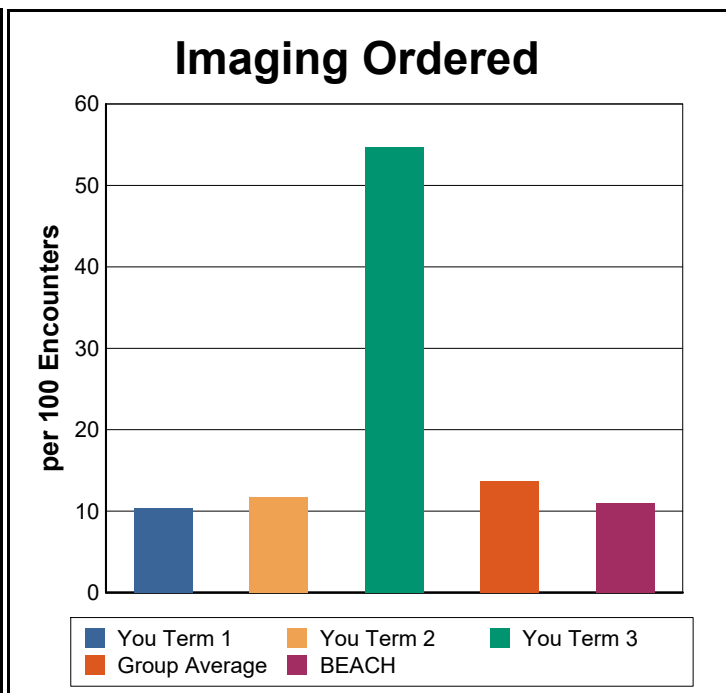


Figure 8. Imaging ordered (rate per 100 encounters)

The top ten pathology and imaging requests by all registrars are listed below.

Pathology Requests
1. Full blood count
2. EUC test
3. Liver function test
4. Lipids profile test
5. Urine MC&S test
6. Iron studies test
7. Thyroid function test
8. TSH test
9. C reactive protein test
10. Fasting glucose test

Imaging Requests
1. Chest X-ray
2. Ultrasound of the pelvis
3. Electrocardiogram
4. Ultrasound of the abdomen
5. X-ray of the knee
6. Obstetric ultrasound
7. Ultrasound of the breast
8. X-ray of the foot or feet
9. Ultrasound of the shoulder
10. Mammography

3.5 Management

GP registrars overall prescribed or recommended new medications at a rate of 48.6 per 100 encounters (and at least once in 37.5% of consultations). GP registrars made 11.7 specialist referrals per 100 encounters.

Figure 9 refers to your rate of prescribing new medications per 100 encounters compared to all registrars.

Figure 10 refers to your rate of specialist referrals per 100 encounters compared to all registrars and established GPs.

Please note that these graphs also refer to rates per 100 encounters, not percentages.

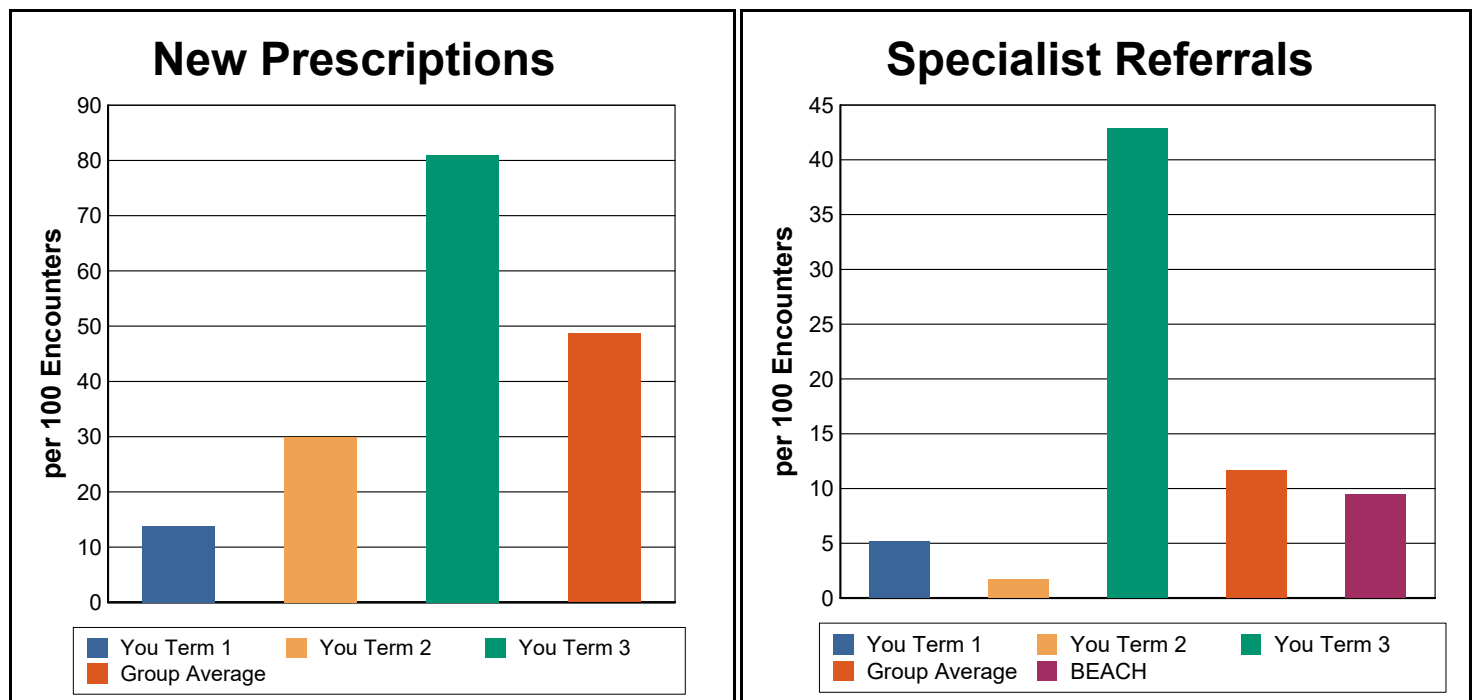


Figure 9. New medications prescribed (rate per 100 encounters)

Figure 10. Specialist referrals (rate per 100 encounters)

Reflective Questions

Are your clinical exposure, investigation rate, and management different to your peers?
If so, what personal, practice and training factors might contribute to this?
How could this information inform your future training plans?
Has your pattern of prescribing and of referral changed with experience during training?
If so, how?

Hospital Referrals

You sent 3 patients to hospital during the data collection period.

Reflective Questions

If you referred a patient/s to hospital:
Do you recall the presentation/s?
Did you follow up on the outcome/s?

The top ten medications newly prescribed by all GP registrars are listed below.

Medications Newly Prescribed
1. Paracetamol
2. Influenza, inactivated, split virus or surface antigen
3. Amoxicillin
4. Ibuprofen
5. Cefalexin
6. Amoxicillin and enzyme inhibitor
7. Prednisolone
8. Phenoxymethylpenicillin
9. Mometasone
10. Codeine, combinations excl. psycholeptics

Rational De-prescribing

Like rational prescribing, rational de-prescribing of medicines no longer appropriate for a particular patient is an important task of the general practitioner.

In this period you de-prescribed 15 medications that the patient had been using for 3 months or more.

These were

- Diazepam
- Aciclovir
- Etonogestrel
- Diazepam
- Teriflunomide
- Isradipine
- Pramipexole
- Atorvastatin
- Diazepam
- Propylthiouracil
- Levonorgestrel and ethinylestradiol
- Ramipril
- Atorvastatin
- Atorvastatin
- Diazepam

The top ten long term (greater than 3 months duration) medications de-prescribed by all GP registrars are listed below.

Medications De-prescribed

1. Levonorgestrel and estrogen
2. Esomeprazole
3. Levonorgestrel and ethinylestradiol
4. Fluticasone
5. Codeine, combinations excl. psycholeptics
6. Diazepam
7. Pregabalin
8. Escitalopram
9. Paracetamol, combinations excl. psycholeptics
10. Perindopril

3.6 Sources of Information

Registrars sought some kind of assistance with patient care in about 25.0% of consultations overall. This comprised consulting with supervisors 12.7%, specialists 1.6%, other health professionals 1.1%, electronic resources 15.1%, hardcopy resources 1.7% and other resources 1.3%. Supervisors were consulted in 15.4%, 8.7% and 5.0% of term 1, 2 and 3 consultations respectively.

Figure 11 refers to the frequency you sought information compared to registrars in the **same term** as you. Please note, an absence of any bars merely reflects that no corresponding data was recorded during the term.

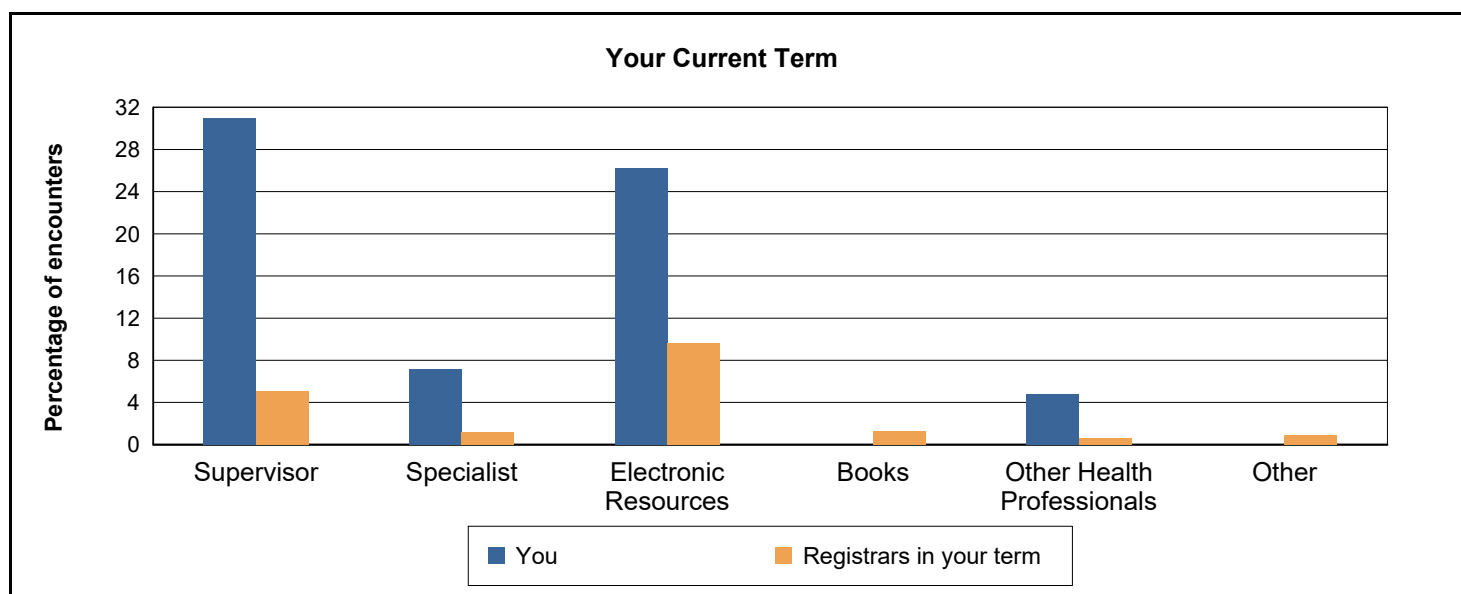


Figure 11. Sources of information accessed for current training term

Figure 12 refers to the frequency you sought information by stages of your training compared to registrars in the **same term** as you.

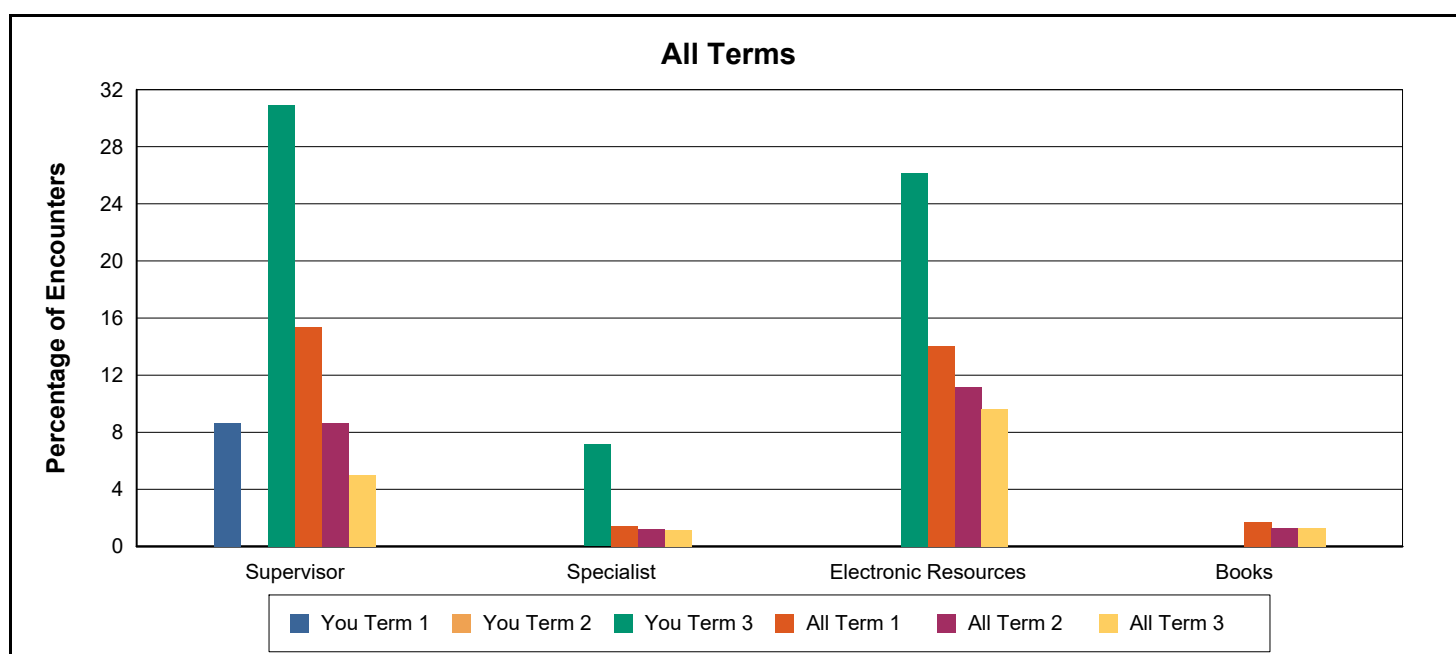


Figure 12. Sources of information accessed for current and all previous training terms

Reflective Questions

Did your rate of seeking information and sources differ from your peers? If so, why might this be?

The top ten sources of information sought by all registrars are listed below.

Sources Of Information
1. Therapeutic Guidelines
2. Murtagh's
3. UpToDate
4. AMH
5. RCH
6. MIMS
7. DermNet
8. Immunisation Handbook
9. Health Pathways
10. Practice Software

3.7 Procedures

The top ten procedures performed by all GP registrars are listed below.

Procedures Performed
1. Intramuscular injection
2. Pap smear
3. Cryotherapy
4. Application of wound dressings
5. Syringe external auditory canal
6. Set up and record 12 lead ECG
7. Excision of superficial skin lesions
8. Venepuncture
9. Punch biopsy of skin lesion
10. Taking of high vaginal swab

3.8 Learning Goals

You generated learning goals for 25.7% of your problems. This compares to 11.4% of all problems for registrars in your term.

The learning goals you generated and the top 10 learning goals by all registrars are listed below. Please note that an absence of any individual learning goals listed reflects that no learning goals were generated.

Reflective Questions

Did you follow-up on your learning goals?

If so, do you think the information gained will influence your future practice?

Your Learning Goals
Amenorrhoea
Anger management
Ankle sprain
Back pain
Bipolar disorder
Cold sore on the lip or nose
Depression
Dyslipidaemia
Failure to thrive
Fall
Family dysfunction
Gynaecological check-up
Hyperthyroidism
Localised skin lesion
Migraine
Migraine headache
Neurological problem
Numbness of arm
Palpitations
Post-operative cardiovascular check-up
Post-operative musculoskeletal check-up
Pregnancy check-up
Preparation of certificate
Rotator cuff injury
Tension headache
Upper respiratory tract infection

All Registrar Learning Goals - Top 10
1. Hypertension
2. Depression
3. Asthma
4. Anxiety
5. Upper respiratory tract infection
6. Abdominal pain
7. Immunisation
8. Migraine
9. Headache
10. Urinary tract infection