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Appendix 1

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Appendix 1 to: Young L, Larkins SL, Sen Gupta TK, et al. Rural general practice placements: alignment with the Australian curriculum framework for junior doctors. *Med J Aust* 2013; 198: 000-000. doi: 10.5694/mja13.10563.

Appendix 1 Summary of literature reviewed

Author(s)	Reference Journal abbrev Year Vol Pages	Location	Research	Particip.	No.	Main findings
Allan et al. (1)	Aust J Rural Health. 2005;13(6):337-42.	SA & NT, Australia	Survey	GPs	578 (response rate 33%)	1. Rural GPs had more diverse training needs than urban GPs 2. The diversity emphasises how rural/remote general practice is different
Barrett et al. (2)	Acad Med. 2011;86(2):259-63.	USA, Canada	Review	Undergrad	72 studies	Rural rotations seemed to do as well as, and often better than, their urban counterparts
Bianchi et al. (3)	Med Teach. 2008;30(1):67-71.	Canada	Retrospective cohort	Undergrad	138	Rural vs. urban: 1. Distributed clinical education can produce equivalent or better educational outcomes relative to traditional tertiary-care settings
Brett (4)	Aust Fam Physician. 2008;37(4):363-6.	UK, Denmark, Ireland, Australia	Opinion	PGY1–3	n/a	Snap-shot of innovative general practice training schemes
Cantillon et al. (5)	National University of Ireland, Galway, 2005 Research and Development Report Number 4.	Ireland	Qualitative	PGY1; Trainers	4 PGY1; 2 GP trainers; 1 consultant trainer	1. GPP offered a qualitatively different clinical experience 2. Considerably more patient contact and responsibility, less administration in GPP 3. GPP available for those considering hospital and GP career 4. 2 week induction to GP and spend time each week hospital team 5. Supervisory workload is considerably greater for GPP than hospital placement
Field et al. (6)	Innovative training posts in general practice: An evaluation of the North Trent experience. 2002;13(3):362-9.	UK	Qualitative	Registrars, GP trainers, Practice managers	6 registrars; 6 GP trainers; 5 practice managers	Benefits of more GPPs for PGY1–3: 1. Extra general practice experience in supported environment 2. Expertise in areas not covered well in hospital training 3. GPP and hospital placement means gain knowledge and skills in secondary care specialties and general practice
Grace et al. (7)	Med J Aust. 2007;186(7 Suppl):S28-S30.	SA, Australia	Opinion	PGY1–3	n/a	GPPs conformed with ACFJD
Hesketh et al. (8)	Med Teach. 2003;25(1):67-76.	Scotland, UK	Qualitative; Survey	PGY1	40 (GPP & hospital)	1. Professionalism an important learning outcome, especially team work 2. Tasks most developed include: communication; history taking; clinical examination 3. Require additional training in certain areas, especially health promotion

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Hewitt et al. (9)	Hewitt N, McKinstry B, Wilton J. Pre-registration house officers in general practice: A report on the experience in South East Scotland 1998-99. Educ Prim Care. 2001;12(2):185-92.	Scotland, UK	Opinion	PGY1	6	A snap-shot of setting up a GPP scheme
Humphreys et al. (10)	Med J Aust. 2003;179(8):416-20.	Non-metropolitan, Australia	Survey	GPs	1,498	Complexity of services delivered by GPs increased with remoteness
Illing et al. (11)	BMJ. 2003;326(7397):1019-22.	UK	Review	PGY1; Trainers	180 PGY1; 45 GP trainers; 105 consultant trainers	1. Learn a different doctor–patient relationship, patients' expectations 2. Improve communication and consultation skills 3. Share information and decisions with patients 4. Specific disease management and prevention 5. Greater responsibility for the management of patients 6. Social and psychological factors in illness 7. Incidence and prevalence of disease in the community 8. Knowledge and management of common and chronic illness in the community 9. Assessment of patients at home 10. Learn about diagnostic uncertainty in the community and hospital referral 11. Gain experience of areas not usually seen: Psychiatry, Paediatrics, Obstetrics and Gynaecology 12. Skills in information technology 13. Ethical and legal aspects of practice
Illing et al. (12)	Med Educ. 1999;33(12):894-900.	UK	Qualitative	PGY1	Unknown	1. Gained in educational and clinical terms 2. High level of individual supervision and teaching 3. Encountered a wider spectrum of illness than in hospital 4. Found certain aspects of general practice stressful 5. Greater commitment to supervision required by trainers 6. Supervision requires support and possibly further education for trainers
Kendall et al. (13)	Med Teach. 2005;27(7):619-24.	UK	Qualitative	PGY2+	16 PGY2–3; 24 PGY3+	Asked PGY3+ about their experience of PGY1

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Knox et al. (14)	Locality matters: The influence of geography on general practice in Australia 1998-2004. Canberra, ACT: Australian Institute of Health and Welfare, 2005 GEP17.	Australia wide	Survey (1998–2004)	GPs	6,019 (rr n/a)	1. Urban and rural GPs had similar encounters with patients, except: a. Aboriginal and Torres Strait Islander patients increased with remoteness b. ≥ 65 dropped and 25–44 rose significantly in R and VR areas c. Proportionally more male patients in OR and R areas
Mak et al. (15)	Med Teach. 2006;28(6):e149-e55.	Indigenous communities, WA, Australia	Qualitative (2001-2002)	PGY1–2	4	1. Gained knowledge and practical experience in: a. Clinical and public health management b. Sexually transmitted infections c. Immunisation d. Primary health care in remote settings 2. Developed deeper understanding of health and illness 3. Experienced considerable professional and personal growth 4. More placements should be offered in public and remote area health
Mak et al. (16)	Aust J Rural Health. 2005;13(3):183-90.	Indigenous communities, WA, Australia	Opinion	PGY1	n/a	1. Public health and remote area medicine are underserved 2. Has an ethos of 'service in return for learning'
Martin et al. (17)	Med J Aust. 2007;186(7):346-9.	SA, Australia	Qualitative	PGY1	5 urban; 15 rural	1. Perceived GPP and hospital placements to be complementary. 2. Best aspects of GPP were: a. One-on-one consulting b. Initiating patient management c. Practice a range of procedural skills.
McKendry et al. (18)	CMAJ. 2000;163(6):708-11.	Canada	Retrospective cohort (1994–1997)	PGY1–3	922 urban; 91 remote	Remote v urban – No significant different ($p > 0.05$) between groups, based on: 1. Medical Council of Canada Qualifying Examination Part I 2. Medical Council of Canada Qualifying Examination Part II 3. College of Family Physicians of Canada certification examination
Mugford et al. (19)	Aust J Rural Health. 2001;9(Suppl):S27-S31.	SA, Australia	Descriptive	PGY1–3	n/a	GPP and rural hospital: 1. Blend of hospital and community based experiences 2. A high-quality learning experience 3. Ready access to patients and procedural work

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Murray et al. (20)	BMJ. 1997;315(7113): 920-3.	UK	Randomised crossover	PGY1	208 (92% response rate)	1. 10 week general medicine rotation, half assigned to GPP and half to hospital, swap after 5 weeks 2. Outcome measure was an objective structured clinical examination 3. Overall, clinical skills same for GPP and hospital
Nichols et al. (21)	Rural Remote Health. 2004;4(2):Article No. 259.	Australia	Qualitative	PGY 2, 3	107	1. Diversity, breadth and autonomy of practice 2. Range of work 3. Duality of roles in practice, hospital and community
Rolfe et al. (22)	Med Teach. 2002;24(1):16-22.	NSW, Australia	Opinion; Survey	Health professionals; PGY1	99 PGY1 (rr 51%)	1. Literature and health professionals created a curriculum of 106 conditions: a. 77 differentiated – definitive diagnosis b. 29 undifferentiated – undiagnosed symptom complex 2. Sought PGY1 theoretical and clinical knowledge
Scallan (23)	Educ Prim Care. 2005;16(3):256-64.	UK	Review	PGY1	n/a	Positive aspects of GP: 1. Breadth of clinical experience/variety of patients seen 2. Emphasis on holistic patient care 3. Responsibility for patients 4. Widen perspectives on healthcare and community care 5. Better understanding of the primary–secondary care relationship 6. Well-supervised 7. Quality of teaching by trainer(s) 8. Protected time for study and learning 9. Prompts trainer reflection on practice 10. Boosts confidence in knowledge, skills and abilities
Schauer et al. (24)	Acad Med. 2006;81(7):603-7.	USA	Retrospective cohort	PGY3	296 urban; 29 rural	Rural v urban: 1. No difference on Medical College Admission Test (pre-med school) 2. No difference on United States Medical Licensing Examination, Step 1 and Step 2 3. Rural group performed significantly better ($p < 0.05$) on internal medicine clinical preceptor assessments
Sen Gupta et al. (25)	Rural Remote Health. 2011;11(1):Article No. 1511.	Qld, Australia	Retrospective cohort	Undergrad	4 hospitals; 4 years; 291 students	4 hospitals: 3 varied tertiary care; 1 secondary care 1. No significant difference in the mean scores for each site 2. No significant difference overall in median ranking across the years

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Thistlethwaite (26)	Med Educ. 2002;36(1):49-55.	UK	Qualitative	PGY1	12 (GPP and hospital)	1. Communication training lacks emphasis on sharing decisions with patients 2. In GPP, manage patients under supervision and begin to share options with them 3. Varied in experience of managing patients and in the role models observed 4. Develop their own strategies for how much information to give patients
Veitch et al. (27)	Aust J Rural Health. 1999;7(3):160-5.	Remote Qld, Australia	Survey	Patients (GP and out-patient)	1,494 (rr 95%)	Rural hospital and general practice provide an opportunity for more rounded training
White et al. (28)	Teach Learn Med. 2004;16(3):250-4.	USA	Retrospective cohort (5 years)	Postgrad	Unknown	Academic medical centre v community practice: 1. No difference based on grade point average or United States Medical Licensing Examination, Step 1 and Step 2
Williams et al. (29)	Med Educ. 2001;35(8):774-81.	UK	Qualitative	PGY1	12	Benefits of GPP: 1. Recognised the value of the clinical experience 2. Particularly valued individual training based on their own needs 3. Difficult to transfer the skills back into hospital post, need more integrated training
Williams et al. (30)	Med Educ. 2000;34(9):716-20.	UK	Qualitative	PGY1 Consultants	24 PGY1; 17 consultants	Majority of hospital consultants valued the GPP experience for PGY1
Wilton (31)	Educ Prim Care. 2003;14(3):272-6.	UK	Opinion	PGY1	n/a	Benefits of GPP for PGY1: 1. Patients seen in own community and in a family and social setting 2. Emphasis on communication skills 3. Opportunity to follow the natural history of diseases 4. Experience independence and responsibility 5. Hours are less exhausting, more time for individual teaching and study 6. One-to-one teaching
Woloschuk et al. (32)	Teach Learn Med. 2010;22(3):202-4.	Canada	Retrospective cohort	PGY1	242	Undergraduate performance was a poor indicator of PGY1 performance

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Woolley et al. (33)	Effective & enthusiastic rural preceptors – what they need to know and what they need to have. Townsville, Qld: James Cook University, 2006.	Rural and remote Qld, Australia	Qualitative; Survey	Preceptors; Admin staff; Undergrads	50 preceptors and admin staff 26 rural preceptors Undergrads: 47 Year 2, 69 Year 4, 21 Year 6	1. Students sent on rural placements should have: a. Sufficient training in common clinical procedures b. Necessary equipment c. Enthusiasm d. Understand the cultural and confidentiality issues in rural and remote areas 2. Access to resources such as: a. Rooms for tutorials and to examine patients b. Medical education websites and textbooks c. Administration staff 3. Faculty should liaise with preceptors to determine requirements
Worley et al. (34)	BMJ. 2004;328(7433): 207-9.	SA, Australia	Retrospective cohort	Undergrad	263 Adelaide; 68 Darwin; 40 Rural community	1. Year 2: No difference between groups 2. Year 3: Rural community and Darwin groups had a significantly improved score compared with the Adelaide group
Young et al. (35)	Junior doctors develop primary healthcare skills in Indigenous communities. Australian General Practice Network National Forum. Sydney, New South Wales, Australia 2009.	Rural and remote Australia	Qualitative, Survey	PGY 2,3	112	PGPPP doctors developed increased skills with Indigenous patients: 1.Increased communication skills 2. Continuity of care 3. Increased skills with Indigenous patients 4. Women's health and public health with Indigenous patients 5. Cultural sensitivity with Indigenous patients
Young et al. (36)	PGPPP: An opportunity to experience general practice. Coasting to Gold – 14th National Prevocational Medical Education Forum. Surfers Paradise, Queensland, Australia 2009.	Rural and remote Australia	Qualitative, Survey	PGY 2,3 Preceptors DCTs	360	PGPPP doctors attained: 1.Broad range of clinical skills and procedural skills 2. Independent skills in clinical management and emergency skills 3. Communication skills 4. Skills in rural medicine 5.Opportunity to practise preventive care and continuity of care 6. Understanding community health services, healthcare costs

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