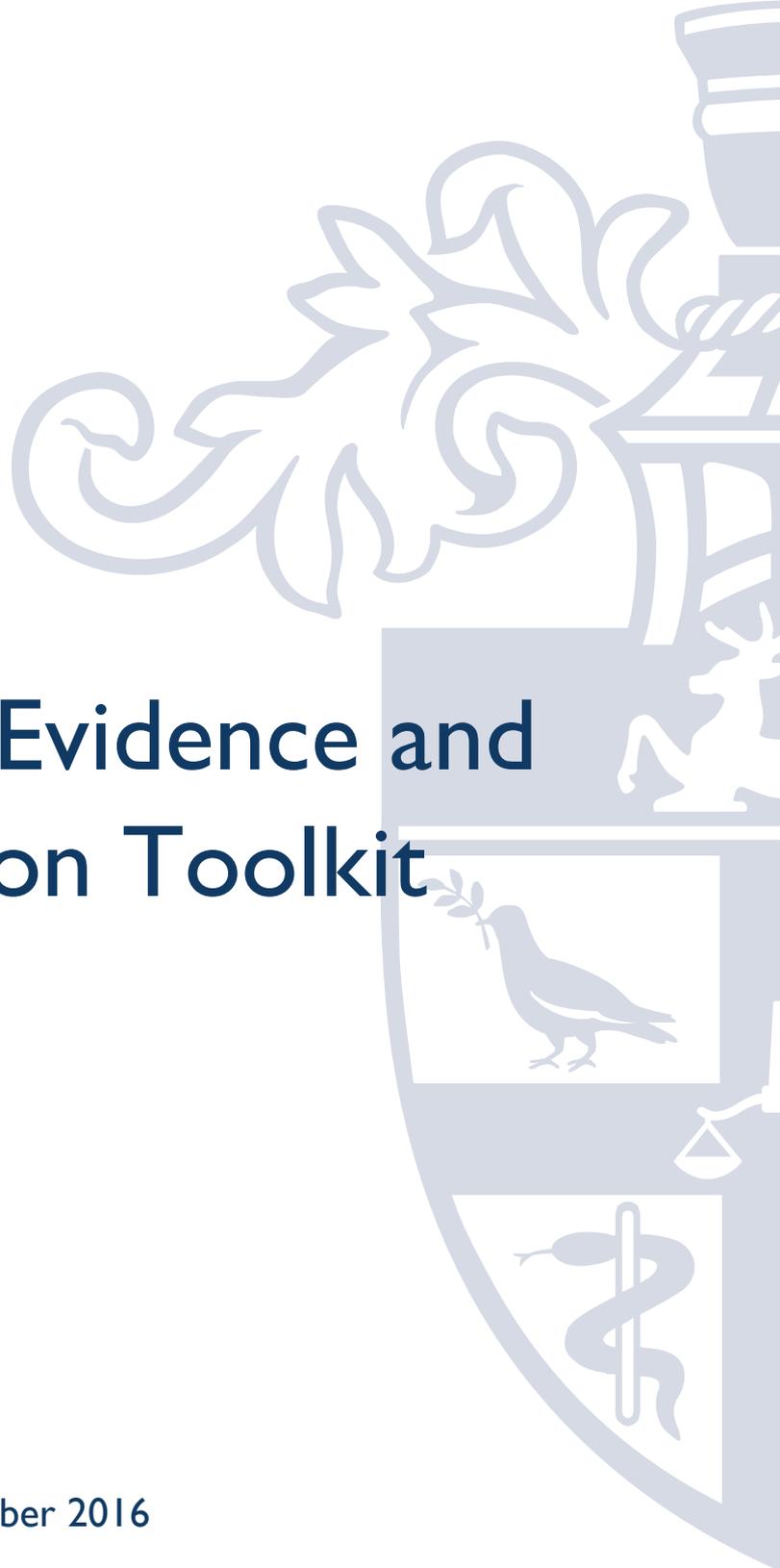




ROYAL
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Research, Evidence and Evaluation Toolkit

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Contents

1	Introducing the RPS Research, Evidence and Evaluation Toolkit (<i>REET</i>).....	3
1.1	Overview and purpose.....	3
1.2	Introduction.....	3
1.3	Development.....	4
1.4	Skillsset structure.....	4
1.4.1	Research skills, methods and strategy.....	4
1.4.2	Research knowledge, intellectual ability and personal qualities.....	5
1.4.3	Research management and leadership.....	5
1.4.4	Communication and dissemination of research.....	5
1.4.5	Research education and training.....	5
1.4.6	Working with others and collaborating in research.....	5
1.4.7	Impact, evaluation and translation of research.....	5
1.5	Applications of the toolkit.....	6
1.6	Alignment with professional stage.....	7
2	Brief illustrated user guide.....	10
2.1	The online <i>REET</i> system.....	10
2.2	Using the toolkit - the 5 steps.....	10
3	Summary and future developments.....	12
3.1	System testing, direction and next steps.....	12
3.2	Expected future activity for the <i>REET</i> development team.....	13
4	Further RPS support for your professional development in research.....	14
4.1	Guidance and advice.....	14
4.2	Support and recognition.....	15
4.3	Evidence and evaluation.....	15

I Introducing the RPS Research, Evidence and Evaluation Toolkit (REET)

I.1 Overview and purpose

The RPS Research, Evidence and Evaluation Toolkit (*REET*) is an interactive resource which describes a set relevant skillsets and activities and gathers practical, structured and context rich examples.

Target audience – Pharmacists and pharmaceutical scientists as well as education and training providers, mentors, employers or any healthcare professionals undertaking (or interested in engaging in) pharmacy/pharmaceutical research and evaluation activities.

Aim – Facilitate the identification, recognition and development of skills and activities that generate evidence.

I.2 Introduction

The *REET* is an interactive resource, which aims to facilitate the identification, recognition and categorisation of research and evaluation skillsets across different areas and stages of practice. It provides a set of structured context rich examples of knowledge, skills, experiences and behaviours that collectively form the building blocks for all pharmacists and pharmaceutical scientists undertaking research and evaluation activities across all sectors and scopes of practice (Fig 1).

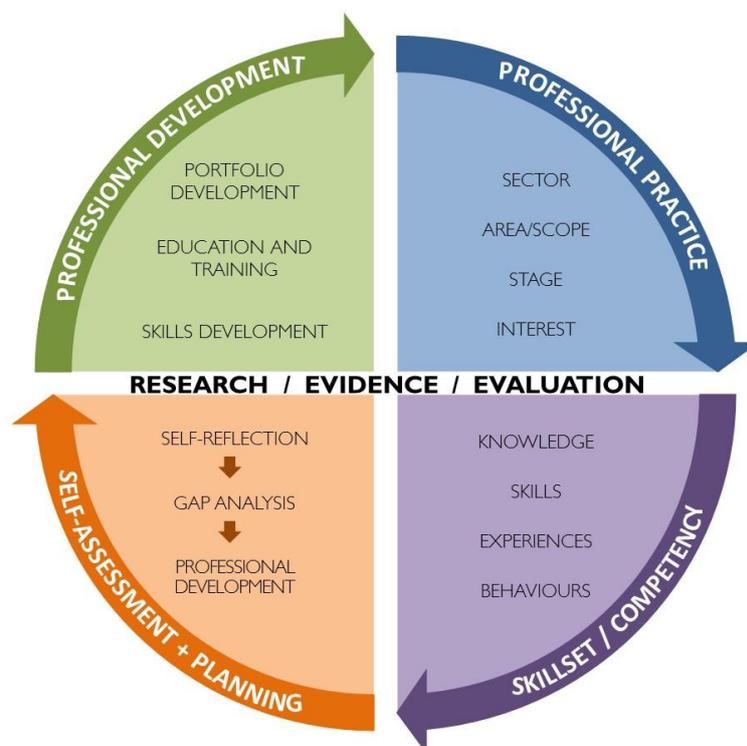


Figure 1: Use of the *REET* supports progression of research skills acquisition from initial identification and recognition, through to professional development and professional practice.

The *REET* also facilitates self-reflection of individual skills level and skills gap and therefore enables the identification of professional development needs. It is intended to be used by pharmacists, pharmaceutical scientists, education and training providers, mentors and employers to support the progression of research skills acquisition.

1.3 Development

The *REET* was developed using a comparative mapping between widely used and recognised professional development programmes and frameworks to ensure applicability across all pharmacy and pharmaceutical research sectors across Great Britain, from foundation through to advanced and specialist levels of practice. The toolkit compares the RPS Foundation Framework (*FPF*)¹, the Advanced Pharmacy Framework (*APF*)² and the multi-disciplinary Vitae Researcher Development Framework³, which are used by many Universities at national level to support the development of pharmacy professionals and researchers.

Following comparative mapping of competencies, specific skill requirements were cross-mapped; in addition, practical examples of research and evaluation activities as well as associated knowledge, skills, experiences and behaviours were identified.

The *REET* can function as a standalone resource for development of research skills and knowledge. It can also act as a useful resource for wider professional development with the overt mapping to existing framework allowing users to identify activities associated with specific competencies. This in turn supports self-reflection as well as recognition of professional development needs and opportunities.

1.4 Skillset structure

The *REET* is structured in seven key skillsets, identified as essential for demonstration of research and evaluation knowledge and skills, as well as necessary for professional development in these areas. To facilitate its use, each skillset is associated to the core competencies of both the RPS *FPF* and *APF*.

The key areas are (Fig 2):

1. Research skills, methods and strategy

This skillset describes specific research skills and methodologies required to allow robust research practice and addresses the personal aspects of developing a research career strategy, including analysing and creating evidence, developing and evaluating research protocols and strategic planning of research. This skillset predominantly links to *FPF* cluster 3 (Personal Practice) and with *APF* clusters 1 (Expert Professional Practice), 3 (Leadership) and 6 (Research and Evaluation).

¹ RPS Foundation Framework, 2014.

² RPS Advanced Pharmacy Framework, 2014.

³ Vitae Researcher Development Framework, 2010.

2. Research knowledge, intellectual ability and personal qualities

This skillset describes the knowledge required to initiate the research process including an understanding of evidence and the ability to review. It also addresses how an individual may approach research knowledge improvement and management of information. This skillset predominantly links to *FPF* clusters 1 (Patient and Pharmaceutical care) and 3 (Personal Practice) and with *APF* clusters 1 (Expert Professional Practice) and 6 (Research and Evaluation).

3. Research management and leadership

This skillset describes the skills required from and obtained by leading and managing research, including managing staff and resources as well as organisational and governance issues. This skillset predominantly links to *FPF* clusters 4 (Management and Organisation) and with *APF* clusters 3 (Leadership) and 4 (Management). This particular skillset also links to the RPS Leadership Competency Framework⁴.

4. Communication and dissemination of research

This skillset describes the effective communication of research and evaluation activities, results and impactful dissemination of research outputs, including communicating, presenting and publishing your research. This skillset predominantly links to *FPF* clusters 2 (Professional Practice) and 3 (Personal Practice) and with *APF* cluster 2 (Collaborative Working Relationships).

5. Research education and training

This skillset describes developing robust, evidence based and research related education and training, including research supervision and mentoring others undertaking research. This skillset predominantly links to *FPF* clusters 2 (Professional Practice) and 3 (Personal Practice) and with *APF* clusters 5 (Education, Training and Development) and 6 (Research and Evaluation).

6. Working with others and collaborating in research

This skillset outlines the core skills required to effectively work with other health care professionals, researchers, patients and other colleagues and those required to build and sustain a collaborative research activity. This skillset predominantly links to *FPF* cluster 2 (Professional Practice) and with *APF* clusters 2 (Collaborative Working Relationships) and 6 (Research and Evaluation).

7. Impact, evaluation and translation of research

This skillset describes the effective use of evidence to develop and inform practice, including scale up and leverage of research and evaluation activities, including the impact on professional practice and service provision. This skillset predominantly links to *FPF* clusters 1 (Patient and Pharmaceutical care) and 3 (Personal Practice) and with *APF* clusters 1 (Expert Professional Practice) and 6 (Research and Evaluation).

⁴ RPS Leadership Competency Framework, 2011.



Figure 2: Seven key areas form the backbone of the *REET*. These areas have been identified as essential for the development in and/or demonstration of research and evaluation knowledge and skills.

1.5 Applications of the toolkit

Who is the *REET* designed for?

The *REET* is intended to be applicable for all healthcare professionals undertaking research and evaluation activities in the field of pharmacy and pharmaceutical science as well as for those wishing to further develop their knowledge and skills in these areas. In addition, this toolkit can also be used by mentors, employers and education and training providers as a guide to better outline professional development and expectations.

Recognising research and evaluation

Healthcare professionals may not always easily recognise their knowledge and skills in the areas of research or evaluation, particularly if these activities are not part of their primary role. We have gathered a collection of examples of pharmacy/pharmaceutical research and evaluation knowledge, skills, experiences and behaviours to facilitate self-reflection and identification of competencies in alignment with the RPS professional development frameworks (*FPF* and *APF*). Each example describes an activity or skill at one particular stage of professional development (Foundation or Advanced practice) and it often maps across different competencies within the frameworks.

Research and your professional development

The *REET* can be used alone or together with the RPS professional development frameworks (*FPF* and *APF*); its practical examples are intended to help users to reflect about their role, identify already acquired knowledge and developed skills and how these might map to the various clusters and competencies in the frameworks.

Users at an early stage of development in the area of research and evaluation should start with considering their role and recognise already acquired knowledge, skills and experience. The nature and level of knowledge and experiences are likely to vary across sectors and stages of practice and can be more easily identified with the examples provided. Once this initial self-reflection and mapping is undertaken, the *REET* can be used to identify areas for professional development.

For pharmacists who are members of the RPS, this toolkit can also be a useful tool to support your Foundation and Faculty journeys, as well as to target your continuous professional development (CPD⁵) and continuing fitness to practice (CfP⁶).

1.6 Alignment with professional stage

In alignment with the RPS professional development frameworks (*FPF* and *APF*), each one of these seven key areas can be described by a number of activities or competencies that define the knowledge, skills, experiences and behaviours when undertaking research and evaluation activities. To facilitate use, the *REET* is also described in four stages of professional development (Table 1).

Table 1: Stages of professional practice or development as described by the RPS professional development frameworks (*FPF* and *APF*).

Foundation

Early career practitioners including those recently qualified or returning to work after career breaks, as well as those who may be changing their scope of practice or practice environment or simply working steadily.

Advanced Stage I

Either early stages of specialisation and advancement, or established in a role, performing well, advanced beyond foundation years.

Advanced Stage II

An expert in an area of practice, experienced. Routinely manages complex situations and a recognised leader locally/regionally.

Mastery

Aligned to recognised leader in community or primary care; Consultant and corporate level practice in NHS; equivalent leads in academia; business/corporate leadership roles in industry; business or strategic leader in community. Recognised as a leader in an area of expertise (nationally often internationally), alongside a breadth of experience.

⁵ RPS Continuing Professional Development.

⁶ General Pharmaceutical Council Continuing Fitness to Practise.

Pre-defined examples

Specific examples of research and evaluation activities are provided in the *REET* (table 2). These examples are intended to help users to reflect about their role, identify already acquired knowledge and developed skills and how these might map to the various clusters and competencies in the frameworks.

Table 2: Examples of research and evaluation activities included in the *REET*. Each example is categorised according to level of practice including Foundation (F) and Advance Stage I (ASI), Stage II (ASII) and Mastery (M). Associated *FPF* or *APF* clusters and competencies are also shown.

Level	Examples	Associated <i>FPF/APF</i> clusters/competencies
Information management		
F	Appropriately identify research questions and/or problems in the research strategy.	Personal Practice
ASI	Responsible for assimilating and assessing the quality of information, data and references for evidence base.	Expert professional practice Research and Evaluation
ASII	Make evidence-based recommendations and recommendations where evidence is inconclusive.	Expert professional practice Leadership Research and Evaluation
M	Work across boundaries to build relationships and share information, plans and resources when undertaking research.	Expert professional practice Collaborative working relationships Leadership Management Education and Training Research and Evaluation
Communication and dissemination of research		
F	Able to present information/data/research.	Professional Practice Personal Practice
ASI	Communicate clearly, precisely and appropriately with others (e.g. other members of the team, collaborators, patients, other researchers, etc.).	Collaborative working relationships Research and Evaluation
ASII	Persuade/influence the immediate research team and/or senior colleagues/other professionals/patients when prioritising and optimising research strategy and/or evidence based service provision.	Collaborative working relationships Leadership Research and Evaluation
M	Recognised as lead for teaching and learning models and methods in research/evaluation area(s).	Expert professional practice Collaborative working relationships Leadership Education and Training Research and Evaluation
Research management and strategy		
F	Monitor and reflect on progress of own research activities and evaluate their outcome(s) and impact.	Professional Practice Personal Practice Management and organisation
ASI	Responsible for identifying and reporting safety/risk related incidents while undertaking research (e.g. when undertaking a clinical trial, a laboratory experiment, etc.).	Management Research and Evaluation
ASII	Supervises team members undertaking research projects and supports them in using the principles project management.	Collaborative working relationships Management Research and Evaluation
M	Demonstrate ability to use skills to make evidence based decisions in complex situations where there are several factors that require analysis, interpretation and comparison.	Expert professional practice Leadership Management Research and Evaluation

The interactive REET system

To facilitate identification of competencies, skills and activities as well as level of practice, the examples listed in the *REET* have been transformed into online records and categorised by addition of various field *tags*. *Tags* are keywords that may reflect a skill, an activity or a particular research and evaluation area as shown in table 3. The flexible categorisation approach using *tags* allows the collection of knowledge and skills to be related into bespoke networks in a multidimensional way, linking categories and topics. The *tagging* process was undertaken as following:

1. Initial *tags* were added to each online record to reflect one specific *FPF/APF* cluster and competency; as an example, the *tag* "Communication" was added to any records referring to communicating about research (e.g. undertaking a presentation about a research project, delivering a training course about research methods, communicating with your team about research).
2. Overlaps were identified for each of the online records and one or more *tags* were assigned to reflect this; using the example above, if the activity referred to delivering a training course about research methods, further *tags* were added to "Communication", including "Education and training", "Research methods" and "Working with others".

Table 3: Examples of research and evaluation activities included in the *REET*. Each example is categorised using a system of *tags* which may reflect the activity, skill or a specific topic.

Level	Examples	Associated tags
F	Able to present information/data/research.	Communication, Dissemination, Education and training, Working with others
ASI	Communicate clearly, precisely and appropriately with others (e.g. other members of the team, collaborators, patients, other researchers, etc.).	Communication, Education and training, Working with others
ASII	Persuade/influence the immediate research team and/or senior colleagues/other professionals/patients when prioritising and optimising research strategy and/or evidence based service provision.	Communication, Dissemination, Education and training, Leadership, Personal qualities, Working with others
M	Recognised as lead for teaching and learning models and methods in research/evaluation area(s).	Communication, Dissemination, Education and training, Leadership

The interactive examples in the online *REET* can be used to support the identification and gathering of evidence of advancement in areas or research and evaluation. In addition, they can also be used at any career stage to facilitate self-assessment, identification of learning gaps and areas for professional development.

2 Brief illustrated user guide

2.1 The online REET system

The REET is supported by an interactive online system designed to provide users with a personalised pathway to identify skills based on level of professional practice, competency of interest or on specific skills identified.

2.2 Using the toolkit - the 5 steps

These examples used a level of practice personalisation approach.

1. Level of practice

Choose the level of practice



2. Skillset area

Choose from seven research and evaluation key areas

Research skills, methods and strategy	Knowledge, intellectual ability and personal qualities	Research management and leadership	Communication and dissemination of research
Research education and training	Working with others and collaborating in research	Impact, evaluation and translation	

3. Activities and skills

Choose from the associated skills or activities (tags)

Research skills, methods and strategy	Knowledge, intellectual ability and personal qualities	Research management and leadership	Communication and dissemination of research
Research education and training	Working with others and collaborating in research	Impact, evaluation and translation	
	Collaborating/Networking		
	Communicating with others		
	Disseminating research		
	Knowledge/intellectual ability		
	Education and training		
	Personal qualities		

4. Examples and context

Browse through specific examples of research and evaluation skills or activities. Identify areas of overlap through associated skills and activities (*tags*).

Working with others and collaborating in research– Communicating with others	
Example	Associated <i>tags</i> (skills and/or activities)
Accept and provide constructive criticism on research strategy and activities.	Communication, Critical evaluation, Intellectual ability, Management, Research strategy, Self-management, Working with others
Provide effective basic training to others undertaking research, ensuring that they are competent to undertake the tasks allocated to them.	Communication, Dissemination, Education and training, Impact, Intellectual ability, Knowledge, Leadership, Management, Professional development, Service provision, Working with others
Provide effective feedback to others undertaking research in the same area(s).	Communication, Education and training, Impact, Knowledge, Leadership, Management, Professional development, Working with others
Communicate clearly, precisely and appropriately with others (e.g. other members of the team, collaborators, patients, other researchers, etc.).	Communication, Impact, Leadership, Research strategy, Working with others

5. Reflecting and recognising skills/skill gaps

Identify already acquired knowledge and developed skills as well as areas of overlap (using associated *tags*). Recognise new knowledge skills experiences and behaviours which could be further developed.

With future planned development, users will be able to see detailed examples of how other professionals have built up these skill areas and evidenced their development and the *REET* will signpost to key training and development opportunities specific to each skill.

Provide effective feedback to others undertaking research in the same area(s).	
Example of an entry for the RPS Foundation Advanced Pharmacy Portfolio (APP)	
<i>Entry title</i>	Student supervision
<i>Description</i>	Supervision of 2 MSc students and 2 PhD students.
<i>Impact statement</i>	<p>Competency 6.5 Supervising others undertaking research</p> <p>I am currently supervising 2 MSc students and 2 PhD students undertaking research in my research team. I am responsible for the overall research strategy, including providing support during the initial literature search and review, developing and evaluating the research methodology as well as analysing results and outcomes. Outcomes of two of these projects have been presented in an international conference and published in a peer review journal.</p>
<i>E&T resources and opportunities</i>	<p>Reading</p> <ol style="list-style-type: none"> Vitae - Supervision and key relationships University College London - Guidance on Appropriate Forms of Supervision of Research Degree Students <p>Workshop</p> <p>Post-graduate research supervision training – 1 day event</p>

3 Summary and future developments

The *REET* is designed to allow pharmacists, pharmaceutical scientists, education and training providers, mentors and employers to identify and facilitate professional development needs and to support the progression of research skill acquisition. The toolkit enables users to:

Identify

- Possible research and evaluation skills and activities.
- Current acquired research and evaluation knowledge, skills, experiences and behaviours (competencies).
- New areas for professional development.

Facilitate

- Self-reflection of skill level and skills gap.
- Use by RPS members during their professional development (including progression through the RPS *Foundation* and RPS *Faculty* Programmes).
- Continuing Professional Development (CPD) and Continuous Fitness to Practice (CFtP).

Support

- Mentors, employers and education and training providers to better outline professional development and expectations.

3.1 System testing, direction and next steps

The RPS is releasing the *REET* in a Beta format to allow for thorough engagement, feedback from potential users and evaluation based development. Initial testing of the *REET* will occur in two distinct phases during the 2016/17 academic year and will enable the RPS to gather comments and feedback to develop real world evidence for toolkit improvement and development.

Phase 1 beta user testing of the interface and information content (November 2016 - February 2017).

Phase 2 pilot group evaluation of the *REET* with both self-nominating users and selected groups of professionals ensuring representation from different sectors, scopes of practice and levels of practice (February 2017-August 2017).

We would love to have you involved. If you would like to be part of the user testing groups please contact practice.research@rpharms.com.

Although distinct, each testing phase will inform the project by assessing:

- The usefulness of the *REET* for self-reflection and professional development;
- Relevance and accuracy of the examples;
- Applicability of the examples to sector, scope and level of practice;
- Further examples that could be included;
- Accurate *tagging* and categorisation of the examples;
- Ease of navigation through the online database;
- Ideas for future development of the online database.

3.2 Expected future activity for the *REET* development team

During *Phase 1* of testing and following completion of *Phase 2* assessments, the RPS will process and analyse comments and feedback from the test groups, undertaking further IT development of the online *REET* to achieve a more personalised navigation through the skillsets and examples.

In parallel to the testing phases, the RPS will continue with projects to:

- Add further skill-based activities and examples;
- Link to relevant resources (internally, such as the RPS Research Resource Hub which provides support and guidance related to research and externally to other appropriate resources);
- Map to advisory and training opportunities to develop skillsets;
- Continue to map and align the skillsets and examples to professional development and research frameworks;
- Work to ensure applicability of the *REET* at national and at international level in collaboration with relevant partners and stakeholders.

4 Further RPS support for your professional development in research

The RPS offers guidance, resources and support to all members looking to develop their research skills, be it to lead their own research or to participate in research led by others. These resources include:

4.1 Guidance and advice

RPS Research Resource Hub

The hub provides a structured pathway of research guidance to support your development. Topics include critical review, developing research questions, designing a project, methodology, seeking research funding, analysis and communication of results and guidance on conducting research. Find out more at www.rpharms.com/research.

RPS Research Advice surgeries

We run monthly 1:1 Research Advice surgeries to provide guidance and support for pharmacists involved in or looking to get involved in research. Book via the RPS events page at www.rpharms.com/events.

Research training and events

The RPS Research and Evaluation team runs regular training webinars and events such as our annual 'Developing a Research Funding Proposal Workshop'. We also work with partners to deliver research training to members. Find out more about our latest events on the RPS events page at www.rpharms.com/events.

RPS Research

We also collaborate with a range of stakeholders on individual research projects and strategic initiatives. For enquires to collaborate please contact: practice.research@rpharms.com.

4.2 Support and recognition

Research Ready

Research Ready is an online self-accreditation tool which enables community pharmacies involved in or considering becoming involved in research or research support activities to demonstrate their commitment to research excellence. Find out more at www.rpharms.com/researchready.

Mentoring

The RPS provides support whether you are looking to find a mentor or wanting to become a mentor. We provide resources, networks and an online database to ensure that all members have access to mentorship, and all mentors are supported in through their mentoring journey. Find out more at <http://www.rpharms.com/development/mentoring.asp>.

RPS Networks

The RPS offers a range of networking opportunities including face to face meetings, events and conferences as well as online networking through our online groups and local practice forums. Find out more at <http://www.rpharms.com/home/networking.asp>.

4.3 Evidence and evaluation

RPS library

RPS members have access to a collection of resources available in our Library. Find out more at <http://www.rpharms.com/support/our-library.asp>.

RPS Map of Evidence

The Map of Evidence is an online database which collates evidence and ongoing initiatives that can ultimately inform policy and practice relating to pharmacy. It is also a tool for sharing and showcasing good pharmacy practice and innovation as well as to increase the knowledge exchange and learning in pharmacy and pharmaceutical sciences. Find out more at <http://www.rpharms.com/support/map-of-evidence.asp>.

See more about our RPS Research guidance, support and resources at www.rpharms.com/research.

Join the REET user testing group to access the toolkit and start building your research portfolio. Please contact practice.research@rpharms.com.

