## Appendix Table 1. Search strategies employed

# (i) EBSCO Databases Search Strategy:

TX ("lithium therap\*) OR "lithium") AND TX ( "drug monitoring" OR "drug prescribing" ) AND TX ( "standards" OR "guidelines" OR "guideline adherence" OR "quality" ).

#### (ii) PubMed Search Strategy:

("lithium"[MeSH Terms] OR "lithium"[All Fields]) AND (("drug monitoring"[MeSH Terms] OR ("drug"[All Fields] AND "monitoring"[All Fields]) OR "drug monitoring"[All Fields]) AND ("standards"[Subheading] OR "standards"[All Fields] OR "reference standards"[MeSH Terms] OR ("reference"[All Fields] AND "standards"[All Fields]) OR "reference standards"[All Fields]))

## (iii) SCOPUS Search Strategy:

( TITLE-ABS-KEY ( "lithium monitoring" OR "lithium prescribing" OR "lithium therap\*" OR "lithium treatment" )

AND TITLE-ABS-KEY ( "standards" OR "prescribing patterns" OR "practice" OR "patterns" ) ) AND SUBJAREA ( mult OR medi OR nurs OR vete OR dent OR heal ) AND ( LIMIT-TO ( AFFILCOUNTRY .

"United Kingdom" ) OR LIMIT-TO ( AFFILCOUNTRY , "Ireland" ) ) AND ( LIMIT-TO ( SUBJAREA , "MEDI" ) )

### (iv) Web of Science Search Strategy:

TOPIC: ("lithium therapy\*") OR TOPIC: ("Lithium treatment") AND TOPIC: ("Drug monitoring" OR "drug prescribing") AND TOPIC: (standards OR quality)

Refined by: RESEARCH DOMAINS: ( SCIENCE TECHNOLOGY ) AND RESEARCH AREAS: ( PSYCHIATRY OR GENERAL INTERNAL MEDICINE ) AND LANGUAGES: ( ENGLISH ) AND COUNTRIES/TERRITORIES: ( UK OR IRELAND )

Appendix Table 2. Validity Checklist Items and Scores Based on EBL Critical Appraisal Checklist (Glyn, 2006)

		Butler & Taylor (2000)	Collins et al. (2010)	Eagles et al.(2000)	Glover & Lawley (2005)	Kehoe & Mander (1992)	Paton <i>et al</i> (2013)	Ryman (1997)	Udumaga & Mannion.(2010)	Kirkham et al.(2013)	Buckley et al.
Population	Is the study population representative of all users, actual and eligible, who might be included in the study?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Are inclusion and exclusion criteria definitively outlined?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Is the sample size large enough for sufficiently precise estimates?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Is the response rate large enough for sufficiently precise estimates?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Is the choice of population bias-free?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	If a comparative study:										
	Were participants randomized into groups?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Were the groups comparable at baseline?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Was informed consent obtained?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Data Collection	Are data collection methods clearly described?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Is the data collection instrument validated?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	If based on regularly collected statistics, are the statistics free from subjectivity?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

# Appendix Table 2. (continued)

Data Collection	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?	N/A									
	Is the instrument included in the publication?	N/A									
	Are questions posed clearly enough to be able to elicit precise answers?	N/A									
	Were those involved in data collection not involved in delivering a service to the target population?	U	N	U	U	U	N	U	U	U	Y
Study Design	Is the study type / methodology utilized appropriate?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Is there face validity?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Is the research methodology clearly stated at a level of detail that would allow its replication?	Y	Y	U	Y	Y	Y	Y	N	U	Y
	Was ethics approval obtained?	N/A									
	Are the outcomes clearly stated and discussed in relation to the data collection?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Results	Are all the results clearly outlined?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
	Are confounding variables accounted for?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Do the conclusions accurately reflect the analysis?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Is subset analysis a minor, rather than major, focus of the article?	N/A									
	Are suggestions provided for further areas to research?	Y	Y	Y	N	Y	Y	Y	Y	Y	N
	Is there external validity?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Key: Y(Yes); N(No); U(Unclear); N/A (not applicable)

Appendix Table 3. Qualitative research appraisal tool (based on Kupper et al., 2008)	Crowe et al., 2010 <sup>[14]</sup>
Question 1: Was the sample used in the study appropriate to its research question?	Y
Question 2: Were the data collected appropriately?	Y
Question 3: Were the data analysed appropriately?	Y
Question 4: Can I transfer the results of this study to my own setting?	Y
Question 5: Does the study adequately address potential ethical issues, including reflexivity?	Y
Question 6: Overall: Is what the researchers did clear?	Y