

Supplementary File 2 Quality appraisal of studies included in review

First author & date	CASP criteria										Overview of limitations and richness of data	
	Statement of aims	Appropriate methodology	Appropriate design	Recruitment	Data collection	Reflexivity	Ethical issues	Data analysis	Statement of findings	Valuable		
Arney <i>et al.</i> 2018[23]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • Reasons for declining invitation to participate were not reported. Potential researcher bias not discussed. • Many quotations (with participant occupation) provided to support themes.
Bauer <i>et al.</i> 2017[16]	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Moderately	<ul style="list-style-type: none"> • Recruitment strategy not reported. Unclear whether anyone declined to participate. Unclear how research was explained to participants. Potential researcher bias not discussed. • Many quotations (without participant characteristics) provided that support findings.
Cornelio-Flores <i>et al.</i> 2018[17]	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • Unclear how participants were invited to participate in focus groups and whether any declined. Focus groups held during last GMV session by facilitator external to the research team. • Many quotes included without participant characteristics. Data relatively rich.
Drake <i>et al.</i> 2018[18]	Yes	Yes	Yes	Can't tell	Yes	No	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • Unclear how participants were invited to participate in focus groups and whether any declined. Unclear who facilitated the focus groups and what role/relationship they had with study participants, no discussion of author biases. • Some quotes (without participant characteristics) included though not very rich. Very few patient accounts reported.
Egger <i>et al.</i> 2015[19]	Yes	Yes	Yes	Can't tell	Yes	No	Yes	Can't tell	Yes	Yes	Moderately	<ul style="list-style-type: none"> • Recruitment strategy not reported. Research team involved in delivering SMAs, no discussion of potential researcher bias. Acknowledged potential bias in self-selection of participants. • Fairly thin qualitative data about satisfaction/enjoyment. Quotations provided without participant characteristics.
Housden <i>et al.</i> 2016[25]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • No reflection on potential bias in data collection or analysis by authors. • Good illustrative quotes. In-depth accounts provided.
Housden <i>et al.</i> 2017[29]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • No reflection on potential bias in data collection or analysis by authors. • In-depth analysis. Rich illustrative quotes both HCP and patients.
Kowalski <i>et al.</i> 2018[28]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • Relationship between authors and study participants unclear. Authors appear to be involved data collection, analysis and subsequent SMA implementation. This source of potential bias not discussed. • Rich quotes included in narrative with participant occupation reported. Lots of thin quotes covering lots of aspects mapped onto CFIR framework. Difficult to untangle SMAs from SMA-with peer 2 peer support.
*Lavoie <i>et al.</i> 2013[30]	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> • Unclear how providers were identified, how many were invited and how many declined or for what reason. Potential researcher bias not discussed • Rich data with illustrative quotes presented without reporting patient practitioner characteristics.

Miller <i>et al.</i> 2004[33]	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	Yes	Moderately	<ul style="list-style-type: none"> Unclear if any participants declined to participate in an interview or why. Potential researcher bias not discussed. Qualitative data very thin, no quotations provided.
Siple <i>et al.</i> 2015[20]	Yes	Yes	Yes	Can't tell	Yes	No	Can't tell	Yes	Yes	Very	<ul style="list-style-type: none"> Participant recruitment not described. Reasons for declining invitation not reported. Focused on views of diabetes self-management (which so happened to be via SMA) so less of SMA experience. Quotes are available but themes linked with factors influencing their self-care/motivation and less about SMA experience. Views of wives/carers not presented.
Stevens <i>et al.</i> 2014[21]	Yes	Yes	Yes	Can't tell	Yes	Can't Tell	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> Recruitment strategy not reported. Not clear if any participants declined to participate in an interview. Potential researcher bias not discussed. Quotes from HCP and patents included with participant characteristics. Qualitative data thin.
Stowell <i>et al.</i> 2015[22]	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Can't tell	Can't tell	Yes	Low	<ul style="list-style-type: none"> Recruitment procedure not reported. No reflection on researcher bias. Unclear if ethical approval or informed consent required and/or obtained. No description of qualitative data analysis given. No qualitative data reported - no quotations. Interview findings combined with survey findings and authors narrative does not contain quotes.
Stults <i>et al.</i> 2016[32]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> Reasons for declining study invitation not reported. Potential researcher bias not discussed. Provides rich data. Quotes together with participant characteristics reported-age, gender SMA attended, Only data from patients attending SMAs for chronic condition extracted.
Thompson <i>et al.</i> 2014[24]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> Unclear how participants were selected and contacted. Whether any declined to take part. Some quotes (without participant characteristics) provided in a table with themes and key findings, thin data.
Thompson-Lastad (2018)[31]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> Reflection on potential researcher bias and influence on group dynamics not discussed. Limitation: some SMAs were run for non-long-term conditions therefore coding of only experiences/data that refers to long-term condition SMAs. Lots of rich qualitative data (quotes).
Tokuda <i>et al.</i> 2016[26]	Yes	Yes	Yes	Yes	Yes	No	Yes	Can't tell	Yes	Very	<ul style="list-style-type: none"> Qualitative data analysis process not reported. Potential researcher bias not discussed. Quotations (without patient characteristics) included to support findings, rich data.
*Wong <i>et al.</i> 2015[27]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Very	<ul style="list-style-type: none"> Relationship between researcher and participants unclear. Potential researcher bias not discussed. Rich data. Quotes (without participant characteristics) provided to support key findings.

HCP= healthcare practitioner