

# United in Care: A Modified Delphi Journey to Determine Meaningful Reporting Measures in Specialty Pharmacy



**Autumn Zuckerman, PharmD, BCPS, CSP**

Director, Health Outcomes and Research

Vanderbilt Specialty Pharmacy

**Karen C. Thomas, PharmD, PhD, MBA**

Associate Director, Specialty and Infusion Pharmacies

University of Illinois Chicago, College of Pharmacy

# Learning Objectives

1. Explain the current state of outcome measurement and reporting in specialty pharmacy.
2. Describe the process and lessons learned from designing and executing the modified Delphi methodology to determine consensus on meaningful measures to be used in specialty pharmacy practice.
3. Review case studies of how the modified Delphi methodology has been used to reach consensus by a national multistakeholder panel including results in rheumatoid arthritis, ongoing efforts in inflammatory bowel diseases, and future plans across specialty areas.

# Continuing Pharmacy Education Credit



The Academy of Managed Care Pharmacy (AMCP) is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This activity is accredited to provide 1.25 contact hours of continuing pharmacy education (CPE) credit.

- ✓ Instructions to claim credit can be found in the app
  - ✓ Obtain the session access code
    - ✓ Login to [amcplearn.org](https://amcplearn.org)
    - ✓ Submit by **Monday, April 28, 2025**

# Financial Relationship Disclosures

Faculty/Reviewer/Planner	Reported Relevant Financial Relationships
Autumn Zuckerman, PharmD, BCPS, CSP <i>Faculty</i>	<i>Research support unrelated to this presentation:</i> AstraZeneca, Sanofi, Beigene, UCB
Karen Thomas, PharmD, PhD, MBA <i>Faculty</i>	Disclosed no relevant financial relationships.
Casey Butrus, PharmD <i>Reviewer</i>	Disclosed no relevant financial relationships.
Brittany V. Henry, PharmD, MBA <i>Planner</i>	Disclosed no relevant financial relationships.

# AMCP Antitrust Guidelines

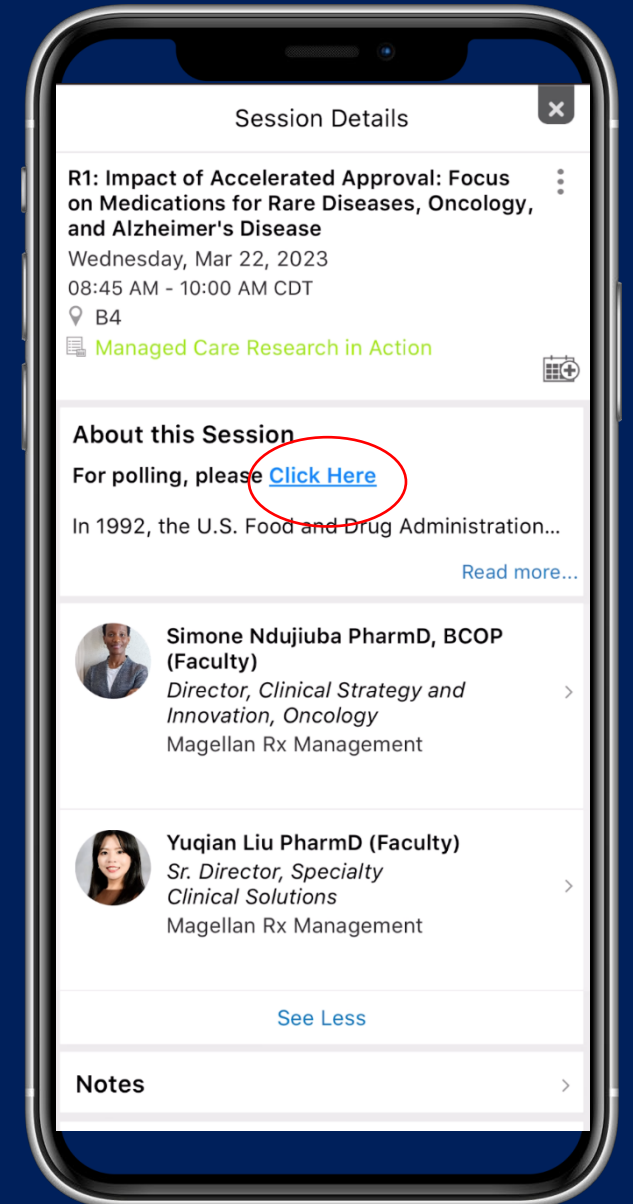
- AMCP's policy is to comply fully and strictly with all federal and state antitrust laws
- Nothing in this presentation should be interpreted as encouraging or suggesting collective action
- This session will be monitored for any antitrust violations and will be stopped by the session monitor if any such violation occurs
- Please refer to the final program or [www.amcp.org/antitrust](http://www.amcp.org/antitrust) for more information

# Participate in Polls and Ask Questions

<https://amcp25.cnf.io/sessions/r1a3>



Download Handouts in App



# Faculty



**Autumn Zuckerman,  
PharmD, BCPS, CSP**

Director, Health Outcomes  
and Research  
Vanderbilt Specialty  
Pharmacy



**Karen Thomas,  
PharmD, PhD, MBA**

Associate Director, Specialty and  
Infusion Pharmacies  
University of Illinois Chicago,  
College of Pharmacy

# Pre-Test





## Polling Question

**LQ1: Which of the following best describes the current state of outcome measurement and reporting in specialty pharmacy?**

- a) Primarily focuses on operational metrics
- b) Efficiently performed structured data from one source
- c) Measures are rarely measured or reported, and there is little emphasis on improving this area
- d) Limited to accreditation measures only

## Polling Question

**LQ2: Which of the following is a key lesson learned from using the modified Delphi methodology to determine consensus on meaningful measures in specialty pharmacy practice?**

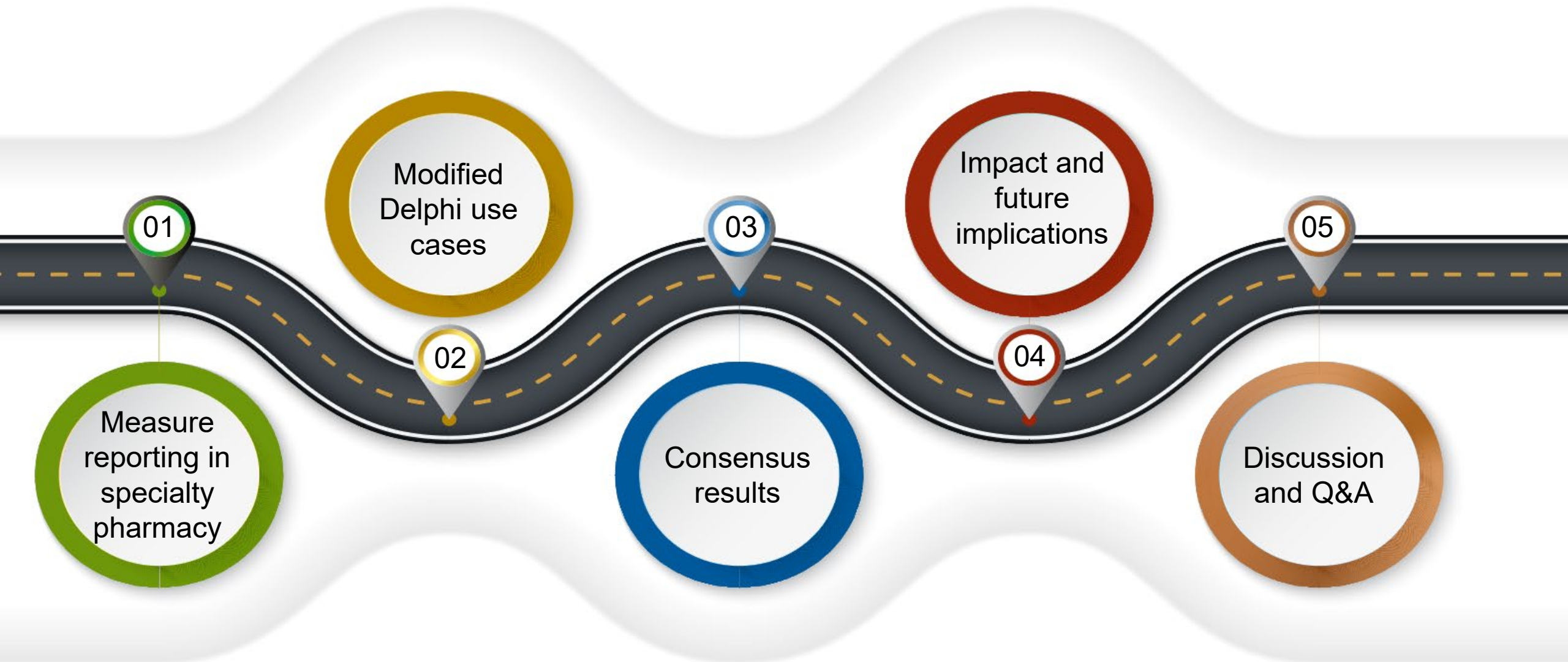
- a) It is ineffective in achieving consensus among experts
- b) There are clear guidelines for how to determine consensus
- c) Engaging a diverse panel of experts makes consensus easier to achieve.
- d) It is helpful to determine the specificity of planned measures prior to engaging experts.

## Polling Question

**LQ3: Which of the following measures were excluded as a result of the first survey round in the modified Delphi study to identify outcome measures for specialty pharmacists in rheumatoid arthritis?**

- a) Adherence
- b) Medication outcomes
- c) Unplanned healthcare utilization
- d) Safety screening

# Presentation Roadmap

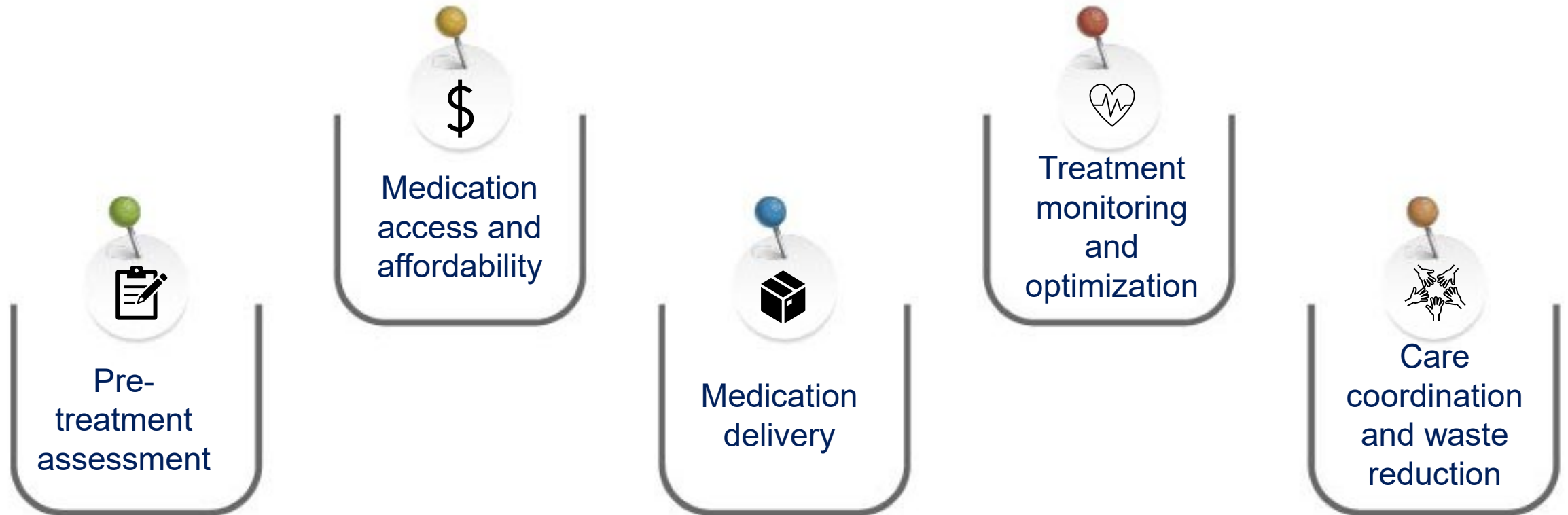


# “Specialty Medications”

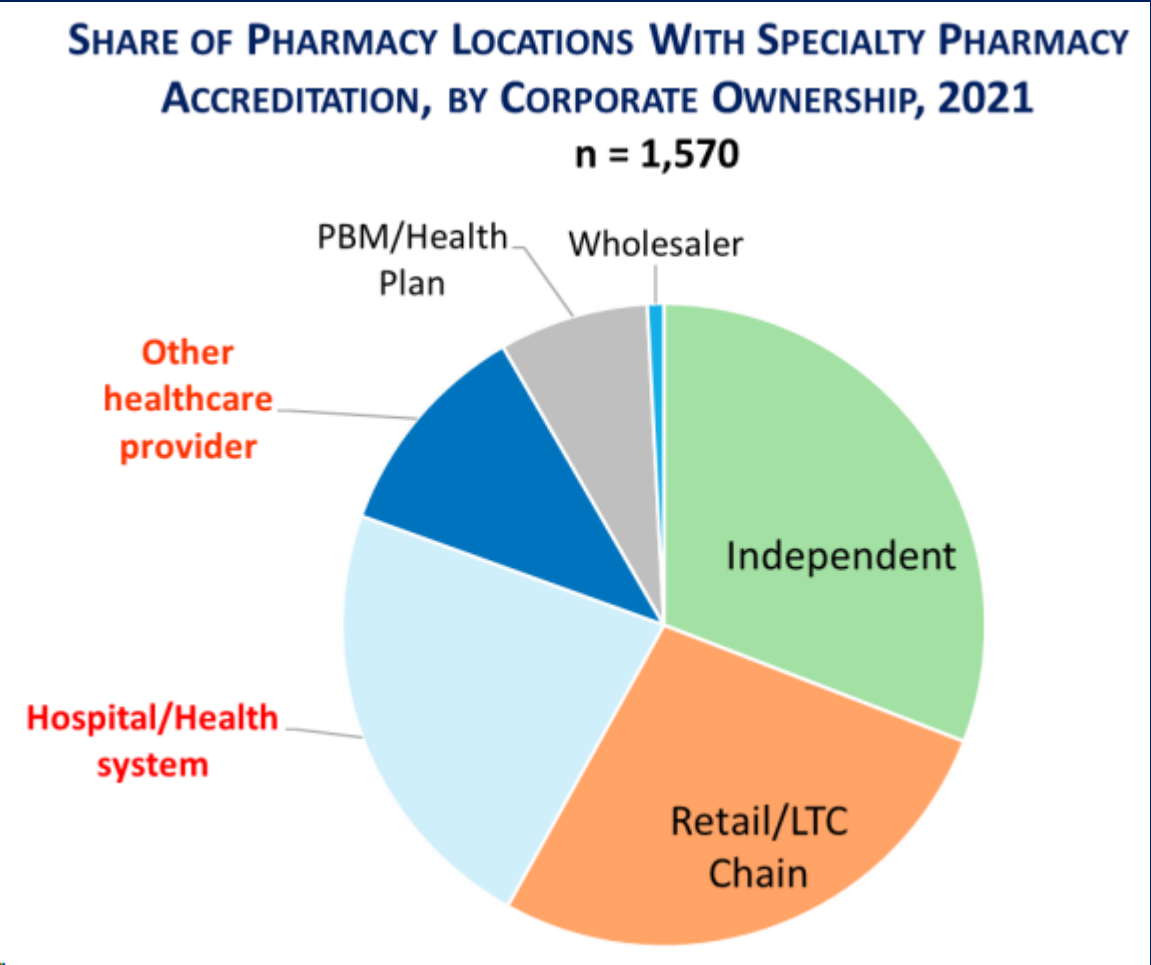
- A specialty drug is **more complex** than most prescription medications and can be a **biologic or traditional** drug.



# Specialty Medications Need a Different Pharmacy Model



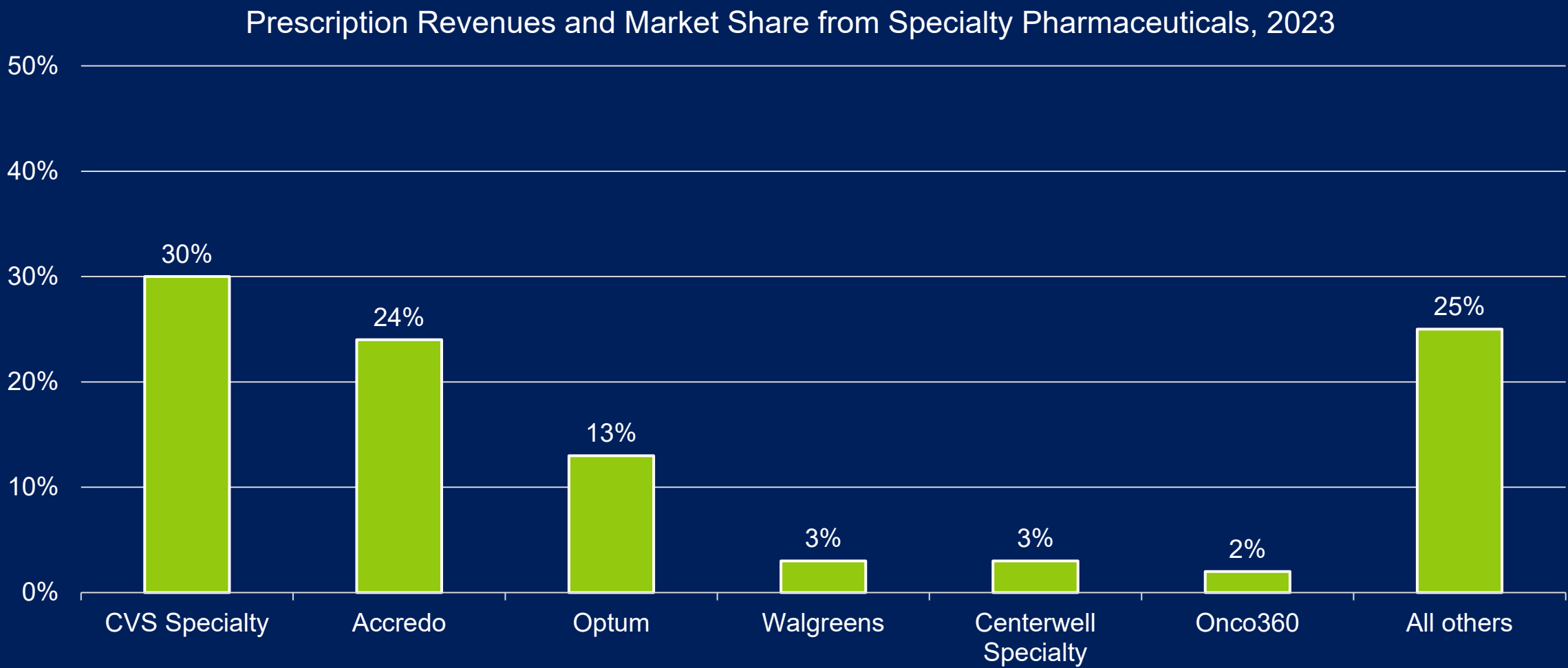
# Specialty Pharmacy Models



- Diversity in pharmacy models
- Specialty medication distribution channels determination:
  - PBM network restrictions
  - Manufacturer distribution restrictions
  - Patient choice



# Specialty Pharmacy Models





# Measures are Used to Set a Standard in Specialty Pharmacy

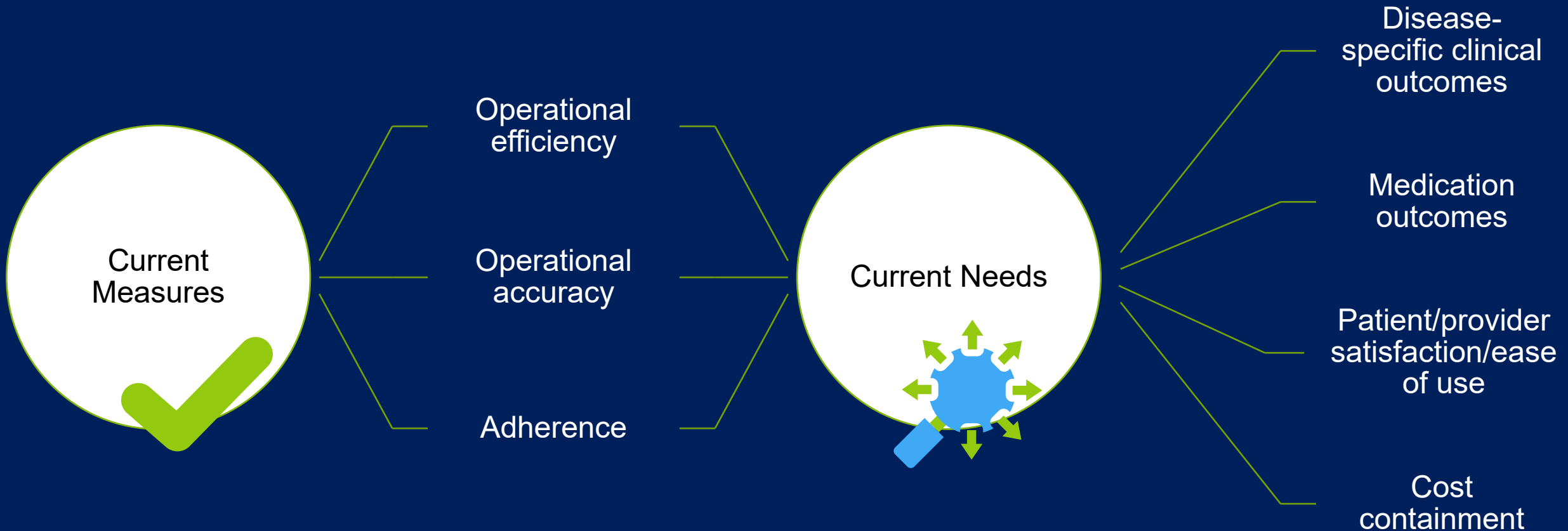
- Accreditation Measures
  - URAC
  - ACHC
- PQA Quality Specialty Measures set



# Specialty Pharmacy Impact on Outcomes



# Current State of Measure Reporting in Specialty Pharmacy



# Specialty Pharmacies Report a Lot of Data



# Varying Data Sources and Structure

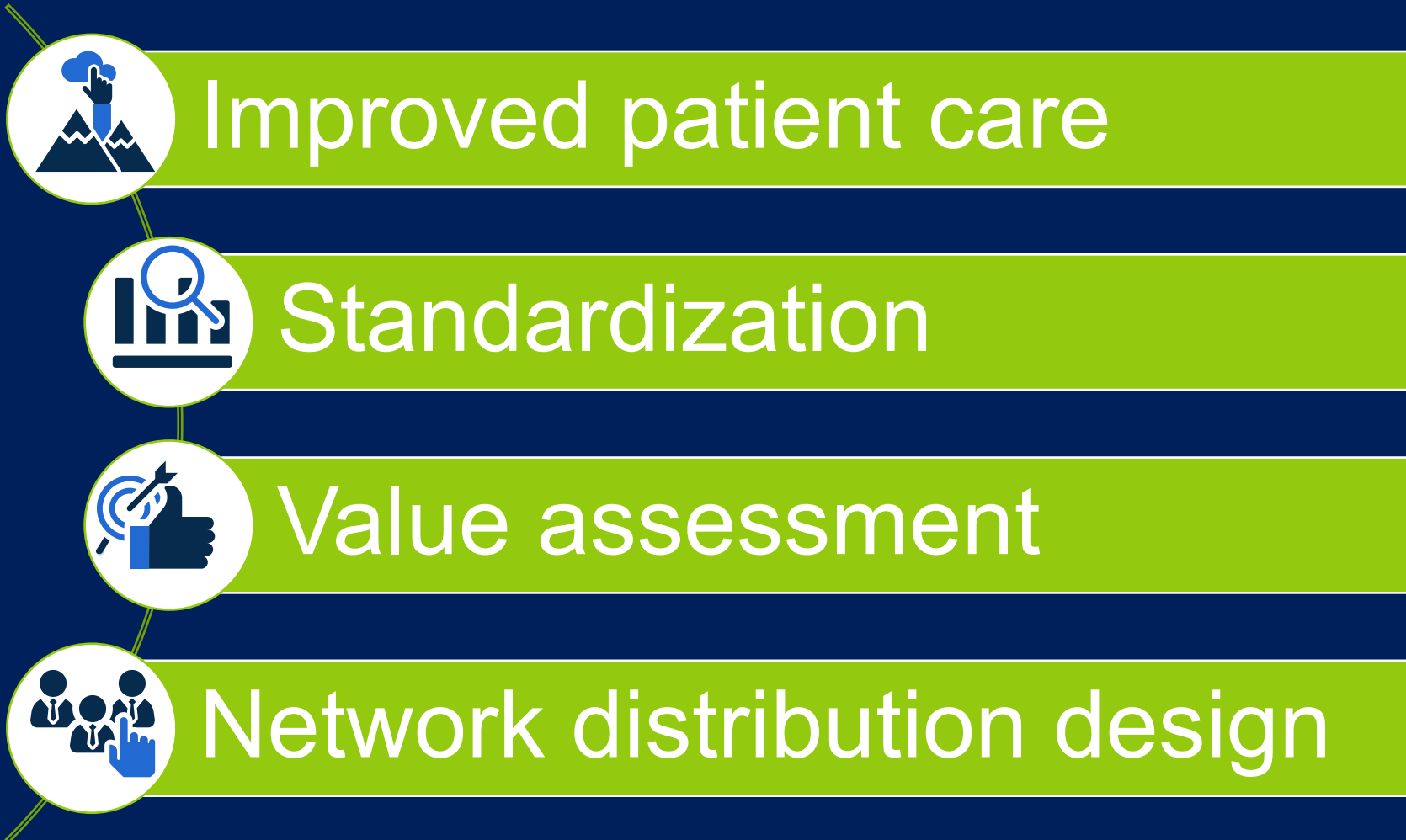


Unstructured



Structured

# How COULD measures be used?



## Agreement Likert Scale

**Standardized measures for specialty pharmacies to collect and report are needed.**

Strongly  
Disagree

Disagree

Neutral

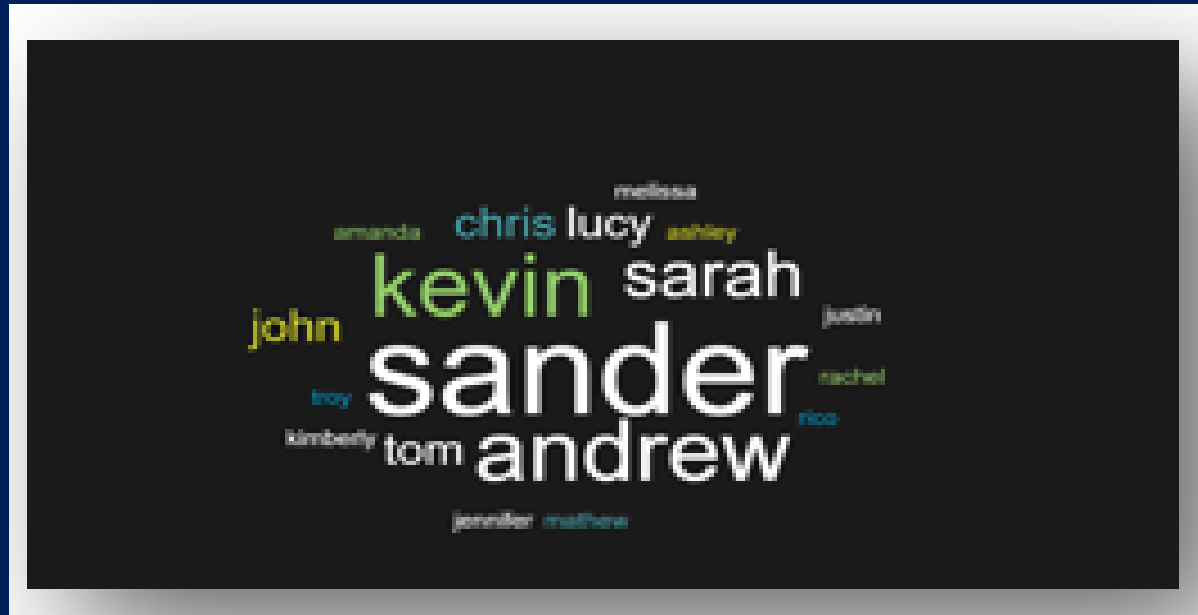
Agree

Strongly  
Agree



## Word Cloud

What is needed to enable standardized measure development?





# Reaching Consensus

- Stakeholder consensus is key to implementation
- Aim: reach an agreement or a **convergence of opinion**
- Methods for reaching consensus
  - [Modified] Delphi method
  - Nominal Group Technique

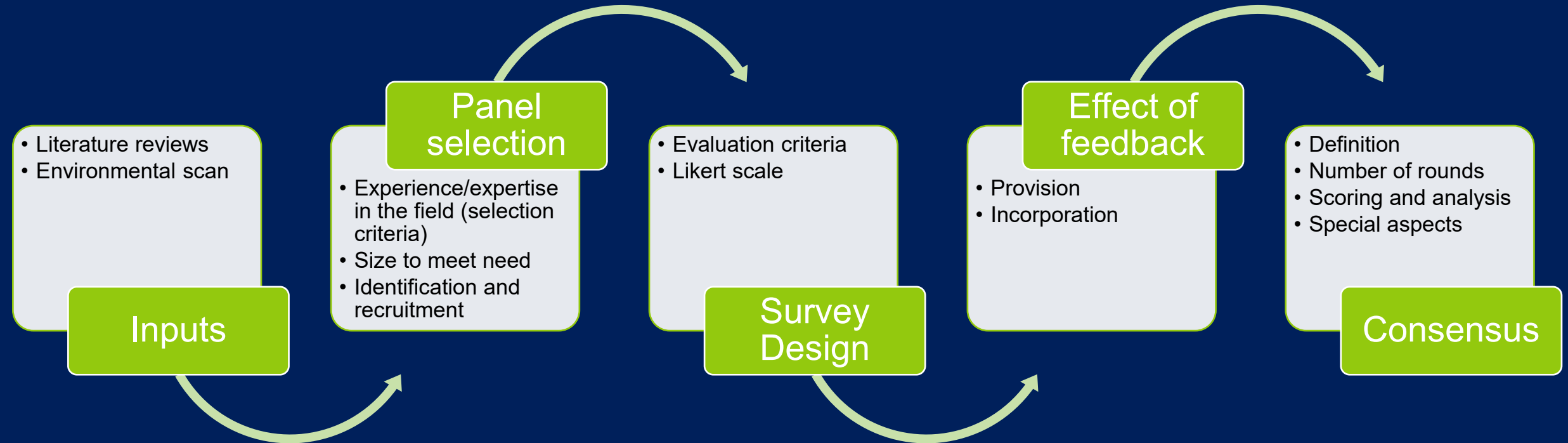


# Modified Delphi Method

- Iterative process of completing questionnaires over several rounds
- Typically uses a Likert scale for respondents to indicate agreement/scoring
- Respondent feedback is circulated anonymously prior to each round

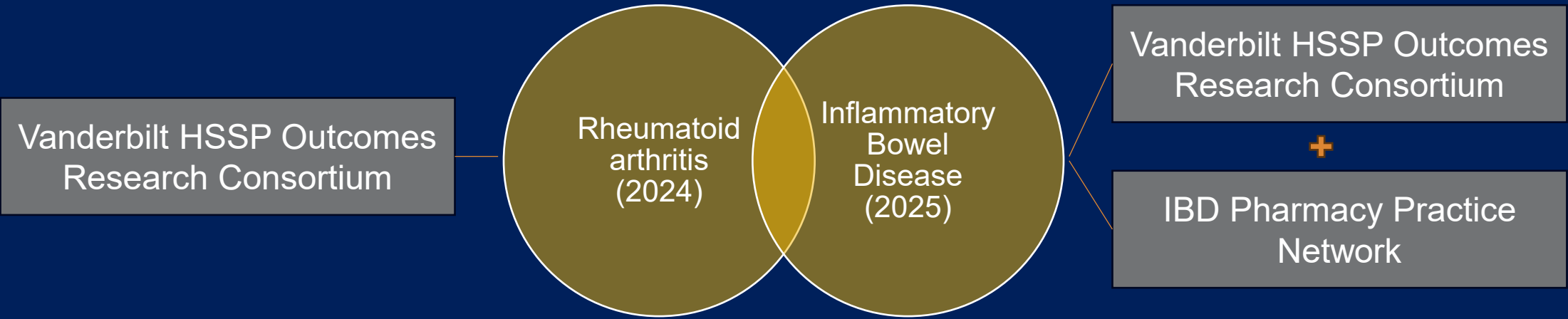


# Elements of the Modified Delphi

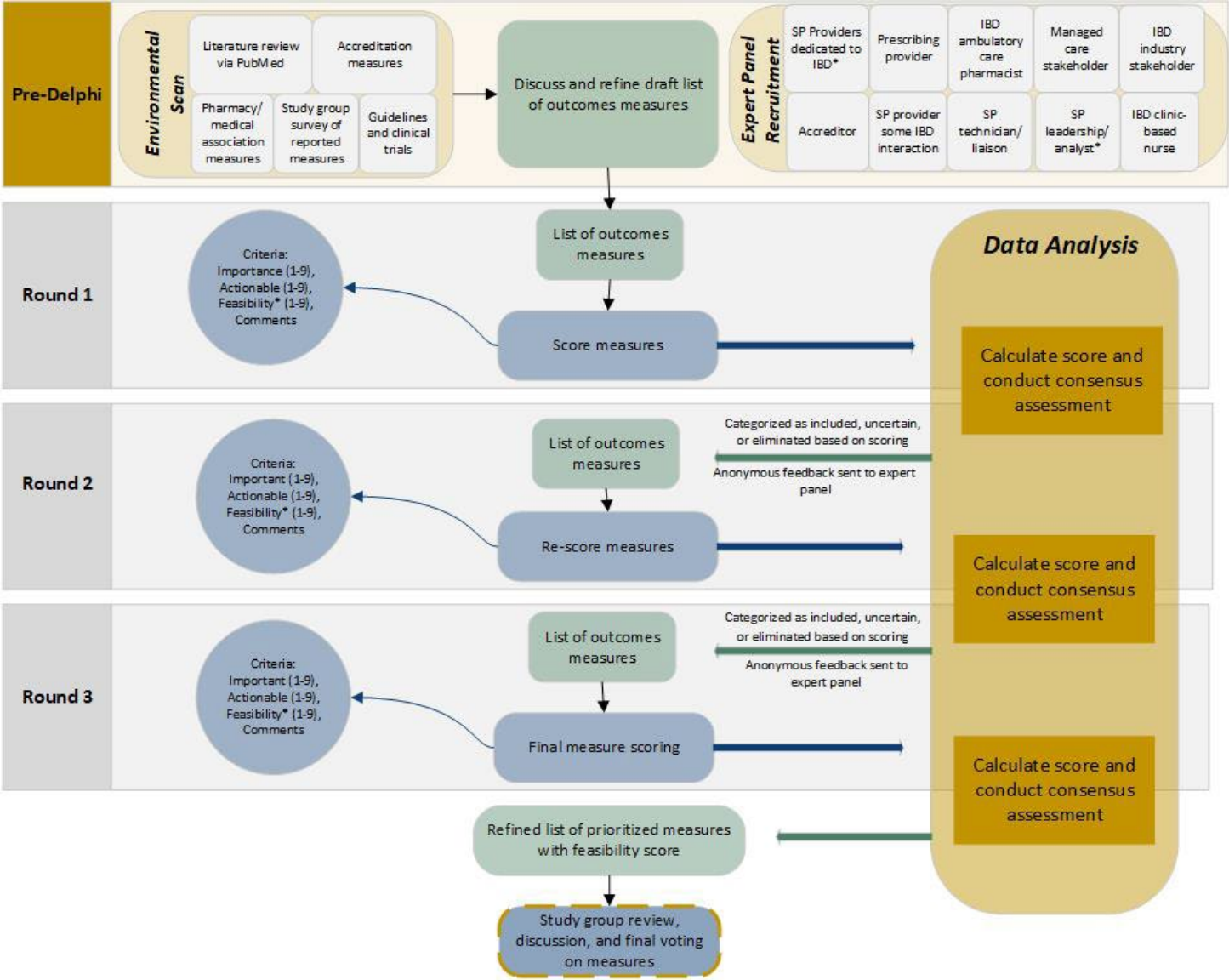


# Project Development

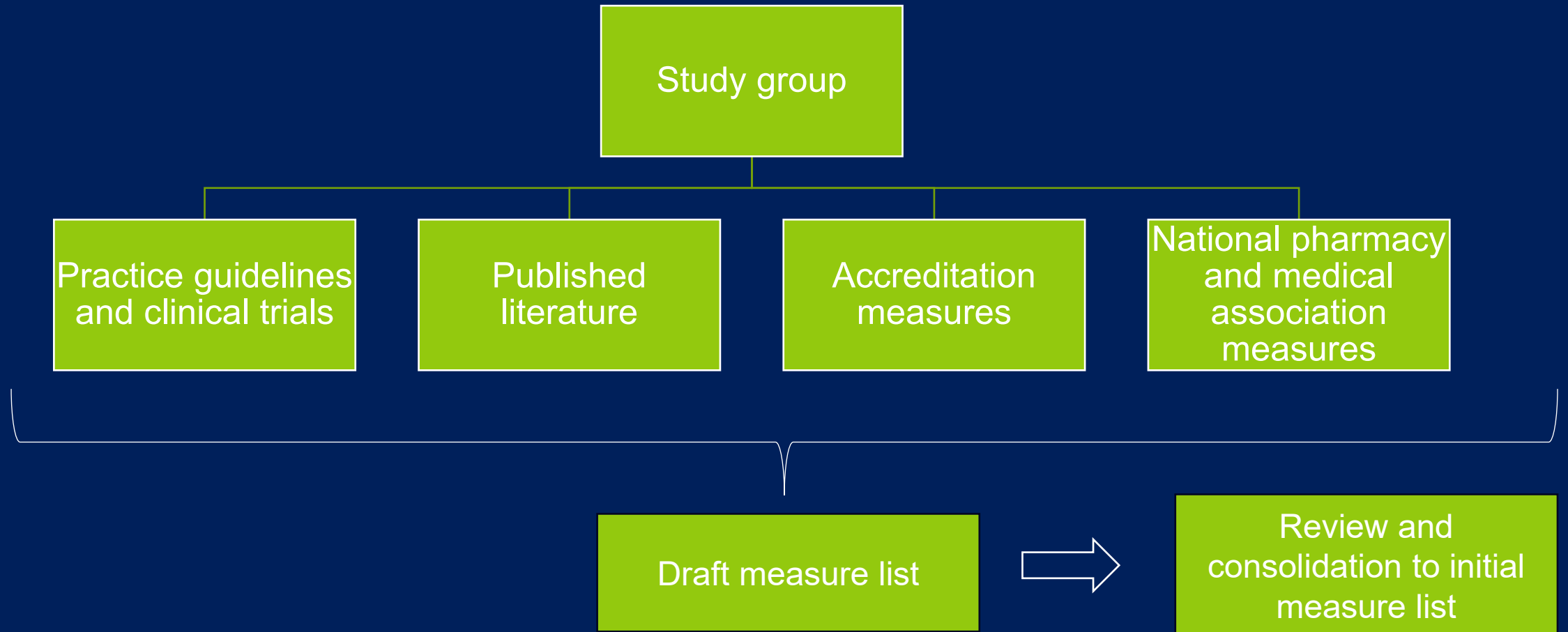
- Vanderbilt Health System Specialty Pharmacy (HSSP) Outcomes Research Consortium (n=70 sites)
- Purpose: Identify important and actionable measures to be used in specialty pharmacy practice
- Study group engagement- listserv used to recruit interested sites within the Consortium



# Study Procedures



# Environmental Scan





		REFERENCE & PURPOSE				SUBJECTS			DATA					
Reviewer 1 Initials	Reviewer 2 Initials	Title, Journal, citation information	DOI	Year Published	Purpose	#	Population Tested/ Population of Interest	Study Design	HSP Study - yes/no	Year(s) Data Collected	Control	Intervention	Measure(s)	Name of the Measure (i.e. primary outcome - please specify)
CE	CED	J Clin Gastroenterol. 2011 Nov-Dec;45(10):878-82. doi: 10.1097/MCG.0b013e3182192207		2011	practices and beliefs of medication adherence	395	Gastroenterologists treating IBD	Survey	no		na	na	na	na
CE	CM	J Crohns Colitis. 2008 Jun;2(2):181-8. doi: 10.1016/j.crohns.2008.02.001.		2008	Define quality of health care	na	na-commentary	Review article/Delphi method	na	na	na	na	na	na
CE	EO	Inflamm Bowel Dis. 2004 Jul;10(4):444-50; discussion 451. doi: 10.1097/C.D.1097.00054725.200407000-00020		2004	ts of communication for health care professionals	na	na-commentary	Review article	no	na	na	na	na	na
CE	JL	Crohns Colitis 360. 2024 Oct 10;6(4):otae055. doi: 10.1093/crocol/otae055		2024	s in IBD (STRIDE-II) - establishing these in	55	at physicians (lay doctors, specialists, etc.) in IBD	anonymous survey, lit review, IBD expert	no	2024	not RCT,	not RCT, qualitative study.	of disability, mucosal healing,	QoL scores (no specific units/
CED	JN	J Am Pharm Assoc (2023). 2023 Nov-Dec;63(6):1776-1784.e3. doi: 10.1016/j.japh.2023.08.023		2023	r interactions with pharmacists, value on	patients, 3 na	Patients with chronic diseases (CVD/ IBD)	Survey/ group sessions - quantitative and	no	Oct-21 mentioned, but COVID	Not RCT,	Not RCT, qualitative	Patient perceptions on Harvey Bradshaw index (HBI), simple clinical colitis activity index (SCCAI), C reactive protein (CRP), fecal calprotectin (FC)	X
					Q CT-P13 (biosimilar) - looking at persisten	178	Patients with IBD	Multicenter cohort study	no	discussing the 2000-2020 (SLR)	Baseline	SC infliximab (biosimilar)	Harvey Bradshaw index (HBI), simple clinical colitis activity index (SCCAI), C reactive protein (CRP), fecal calprotectin (FC)	Harvey Bradshaw index (HBI), simp activity index (SCCAI), C reactive pro calprotectin (FC)
CED	JS	J Crohns Colitis. 2022 Sep 8;16(9):1436-1446. doi: 10.1093/ecco-jcc/jjac053		2022		Variable	IBD - UC and CD - adult 18 and over, with disease evolution[> 1 year]; complex disease history [previous treatment]		yes		X		power disease quality of life (morbidity, mortality, disability)	
CED	KR	J Adv Nurs. 2021 May;77(5):2248-2266. doi: 10.1111/jan.14744. Epub 2021.11.11/jan.14744		2021	atic lit review (SLR) on nursing outcomes	69		Systematic Literature Review	yes		Baseline	X	X	Harvey Bradshaw Index (pri
CED	MO	Gastroenterol Hepatol. 2020 Mar;43(3):126-132. doi: 10.1016/j.gastrohep.2019.09.011		2020	tients refractory to biological treatments.			Observational, retrospective	no	reported,	patients were disproportionately enrolled into program, making non-enrolled outcomes of	Weeks 16, 24, 32, 48 includes interventions such as medication changes, behavioral care integration, integration into a	SIBDO, HBI, UCAI (IBD/GI Metrics), PHQ9 (Depression), GAD-7 (Generalized Anxiety Disorder)	Secondary: Short Inflammatory B Questionnaire, Harvey Bradshaw Index, Patient Health Questionnair
					designed for individuals with IBD. It attar	322 (198 Crohn's, 124 UC)	Patients in the Total Care-IBD program - CD/UC, 16-60 years, member of University of Pittsburgh Medical Center (UPMC) Plan	Retrospective analysis	yes	June 2015-July 2016	disproportionately enrolled into program, making non-enrolled outcomes of	interventions such as medication changes, behavioral care integration, integration into a	IBD symptoms, CRP/biomarkers, standardized questionnaire, QoL, including SF 36	Anxiety Disorder
CED	TD	Clin Gastroenterol Hepatol. 2018 Nov;16(11):1777-1785. doi: 10.1016/j.cjg.2018.04.007		2018		(72% CD, X review)	patients with IBD who had contact with patients without IBD, respectively those on pregnant patients with IBD	Prospective observational study	no	9/2014-8/2015 not specified	X	X	X	X
CED	DS	Eur J Gastroenterol Hepatol. 2017 Jun;29(6):646-650. doi: 10.1097/MEG.0000000000000839		2017	of introducing special IBD nurse position			Review/ synthesis	no		X	X	X	X
CED	AS	World J Gastroenterol. 2016 Sep 14;22(34):7625-44. doi: 10.3748/wjg.v22.i34.7625		2016	nality/ manage medication non-adherence			Synthesis of data/ clinical guidance	no	not specified	X	X	X	X
CED	AZ	Obstet Gynecol. 2015 Aug;126(2):401-412. doi: 10.1097/AOG.0000000000000978		2015	nical guidance on management of IBD dur		Patients with IBD whose obstetric history was collected		no		X	X	X	X

Revised Metric	Revised Category	Clarifications needed
ACR20	Disease activity	none
ACR20, 50	Disease activity	none
ACR50, ACR70, Euler Response	Disease activity	what is the euler response?
activity limitation via FFI	?Functional status	need more detail
anti-CCP	Disease activity (lab)	need more detail
Beck Depression Inventory	QOL	need more detail
BRAF-NRS	unk	need more detail
CDAI	Disease activity	none
CDAI	Disease activity	none
CDAI	Disease activity	none
CDAI	Disease activity	none
CDAI, DAS28, SDAI, RAPID3, PAS-II	Disease activity	none
CDAI, DAS28, CRP, SDAI, RAPID3, PAS-II; PROMIS PF10a, HAQ-II, MD HAQ	Disease activity, functional status	none
Cervical X Ray	Changed to disease activity	need more detail
Consider how your rheumatic disease has affected you during the last week. If you remain in the same condition	QOL	need more detail
CQR-19	unk	need more detail

# Setting Measure Specifications

Measure		1st level	2nd level	3rd level	4th level
A measure (collect, track) of <b>patient disease activity</b> (a measure that informs treat to target or achievement of remission, e.g., morning joint stiffness, disease burden, fatigue, pain)	Yes/No/Unsure	Yes	What should be captured related to disease activity?	1. Documentation that disease activity has been assessed 2. Outcomes of disease activity assessment 3. Actions taken by the pharmacy to address disease activity	
		Yes	What methods should specialty pharmacies use to assess disease activity?	Validated clinical assessment requiring clinical assessment (CDAI, DAS, DAS28-ESR/CRP, SDAI, MBDA, RDAI, RDAI-5)  Validated clinical assessment using patient-reported outcome (RAPID3, RAPID5, PAS-II, RDAI, RDAI-5)  A single question posed to the patient evaluating their own disease activity (patient-reported outcome question)? Laboratory Indicators Other	What is your preferred clinical assessment tool?   Do you have a recommended question?
		Yes	How soon should patient disease activity be measured by specialty pharmacies after treatment initiation	Within 3 months  Within 6 months Within 1 year Other	
		Yes	How often should patient disease activity be measured by specialty pharmacies once the patient is considered stabilized on therapy	Monthly  Every 3 months Every 6 months Annually Other	



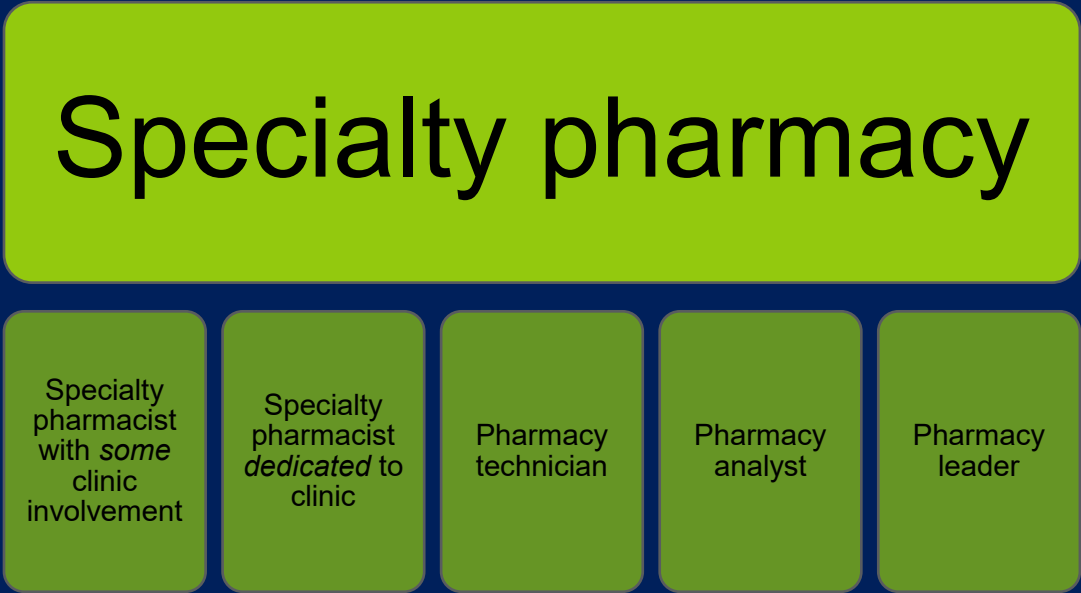
# Environmental Scan Lessons Learned

- Determine the specificity of planned measures and build review procedures around that
- Err on the side of inclusion
- It takes a village!
  - 2 reviewers for each item
  - Timing and deadlines are important



# Stakeholder Selection

- Goal: Incorporate all stakeholders involved in specialty medication management and reporting



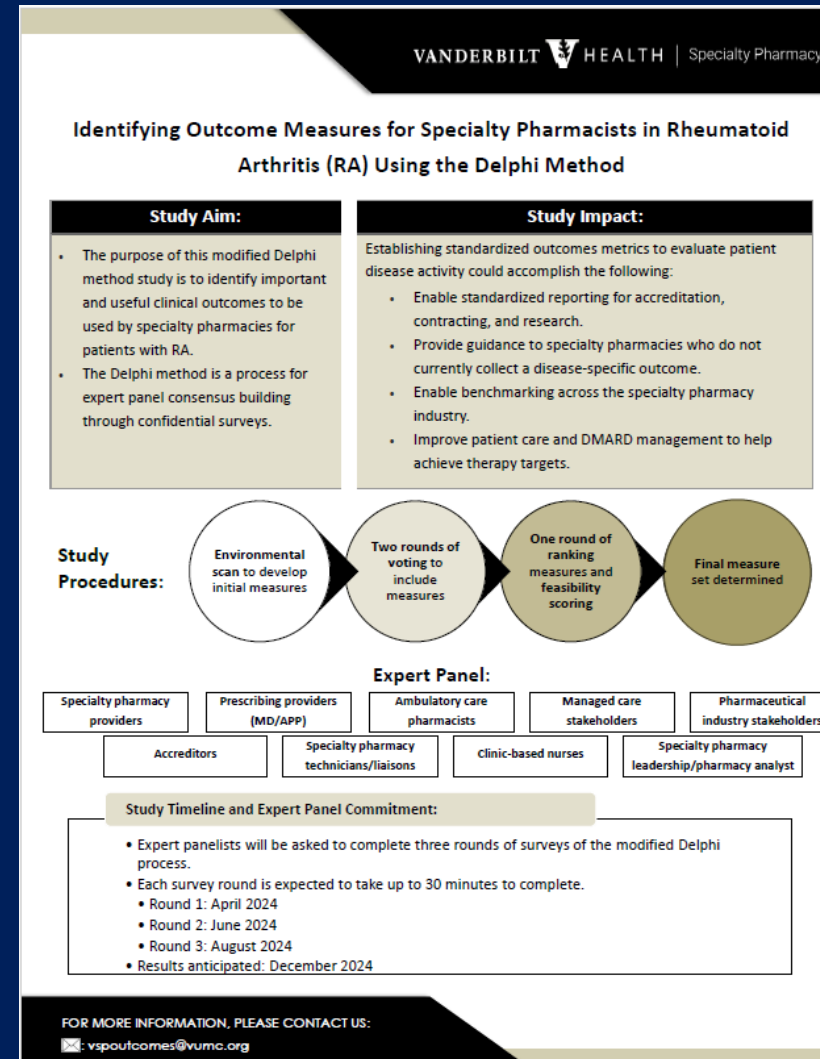
# Stakeholder Selection

- Define selection criteria
- Consider weighting

Expert Panel Role	Selection criteria
Specialty pharmacy providers (PharmD/RN) <b>dedicated to RA</b>	Specialty pharmacy staff member (PharmD or RN) whose primary role is dedicated to educating, managing, and monitoring (including completing reassessments) patients with rheumatologic conditions.
Specialty pharmacy providers (PharmD/RN) <b>with some RA involvement</b>	Specialty pharmacy staff member (PharmD or RN) who assists with educating, managing, and monitoring patients with rheumatologic conditions, but it is not their primary or sole practice area.
Specialty pharmacy technician/liaison	Certified pharmacy technician whose primary role is to assist patients with rheumatologic conditions including assisting with medication access (prior authorizations, insurance appeals and denials), and completing and scheduling refill calls.
Prescribing provider (MD, Advanced Practice Provider [NP/PA])	Provider who routinely treats and prescribes therapy for rheumatoid arthritis. This does not include pharmacists practicing under a collaborative practice agreement.
Ambulatory care pharmacist	Ambulatory care pharmacist whose primary practice site (≥30hours per week) is spent in patient care (education, care coordination, conducts/completes follow-up assessments, etc.) for patients with rheumatologic conditions.
Managed care stakeholder	Healthcare professional who practices in a managed care role involving benefits design, population health management, or reporting/analytics for a health plan. Experts may be employed by an insurer, pharmacy benefits manager, or population health department. The key criterion for this stakeholder is that they are aware of or involved in designing metrics of interest to the managed care organization when evaluating a population of patients with rheumatologic conditions.
Pharmaceutical industry stakeholder	Healthcare professional employed by a pharmaceutical manufacturer which manufactures and distributes specialty medications for RA. The stakeholder should be involved in designing metrics that will be used in contract reporting or whose primary role is in health economics and research (HEOR) at the pharmaceutical manufacturer company.
Accreditor	Healthcare professional employed by an accrediting body for specialty pharmacy that routinely designs or reviews accreditation measures for patients with rheumatologic conditions.
Clinic-based nurse	Nurse whose primary practice site (≥30hours per week) is spent in patient care (education, care coordination, etc.) for patients with rheumatologic conditions. Not affiliated with the specialty pharmacy.
Pharmacy analyst/ Specialty pharmacy leadership	Healthcare professional (most often a pharmacist or pharmacy technician) who manages the collection, aggregation, and reporting of data in patients with rheumatologic conditions to external stakeholders (e.g., accreditors, manufacturers, payers).

# Stakeholder Recruitment

- Study group submitted at least 1 contact per stakeholder type
- Vanderbilt team reached out to each contact
- Stakeholders consented to participate
- Provided acknowledgement opportunity



# Stakeholder Selection and Recruitment

## Lessons Learned

- Definitions are important (and debated)
- Some stakeholders need lengthy approval times for participation
- Likely beneficial to expand beyond study group contacts



# Stakeholder Communication Timeline



# Survey Design

- REDCap
- Anonymous
- Easy to use
- Clear definitions and directions provided

## Measures for Identifying Outcome Measures for Specialty Pharmacists in Rheumatoid Arthritis Using the Delphi Method

Page 1 of 12

---

**Purpose of this survey:**

The purpose of this modified Delphi method study is to identify important and usable measures to be used in specialty pharmacy practice for patients with rheumatoid arthritis. The final measures that expert panelists agree are important and usable will be published and recommended for use in specialty pharmacy practice, particularly among health-system specialty pharmacies who are integrated into health system specialty clinics.

**Survey instructions**

- You will rank each of the 10 measures on importance and usability.
- This survey is anticipated to take 10-20 minutes to complete. You must provide a value for each measure.

Submission of this survey indicates consent to participate in the modified Delphi Method Study for Specialty Pharmacist Identification of Outcome Measures for Patients With Rheumatoid Arthritis Using the Delphi Method at Vanderbilt University Medical Center Institutional Review Board (#231879).

**Please select your expert panel type based on the below descriptions.**

\* must provide value

☐ Self-identified specialist pharmacist  
☐ Self-identified generalist pharmacist  
☐ Self-identified non-pharmacist  
☐ Physician  
☐ Patient  
☐ Other

**Survey Definitions ([Click here to open definitions in a new tab](#))**

Term	Definition
<b>Measure</b>	<i>Verb:</i> Objective evaluation that can be monitored and reported at a population level e.g., specialty pharmacies measure) <i>Noun:</i> Variable of interest to be evaluated (noun- e.g., a measure of disease activity)
<b>Disease activity</b>	Extent to which the patient is experiencing inflammation or other signs or symptoms of immune system activity
<b>Functional status</b>	Impact of RA on the patient's ability to perform daily activities and tasks
<b>Adherence</b>	Extent to which a patient follows the prescribed instructions for their medication regimen
<b>Medication persistence</b>	A measure of how long a patient has been on a specific medication or what proportion of patients has remained on a given therapy at a certain time point after starting, e.g. 89% of patients were still on the same medication X 12 months after initiating therapy. Medication persistence does NOT take into account switching between medications used for the same indication.
<b>Therapeutic persistence</b>	A measure of how long a patient has been on any therapy for a specific indication or what proportion of patients has remained on any therapy at a certain time point after starting, e.g. 89% of patients were still on therapy X 12 months after initiating therapy. Therapeutic persistence DOES take into account switching between medications used for the same indication.
<b>Medication switching</b>	A measure of the number or frequency of patients changing from one medication to another.

# Survey Feedback/Lessons Learned

- Difficulty to complete:



- Definitions are useful, but potentially add complexity
  - No difficulty, just needed to pay close attention to the wording....*
  - I felt there were a lot of nuances within the survey with the wording.*

- Difficulty to Understand:



- Ensure clear flow and explain context of questions
  - May have been good to understand the flow of questions earlier.*
  - Better context and perspective could have been helpful.*



# Expert Panelist Feedback

- Provided at least 1 week prior to most recent round
- Encouraged panelists to review prior to scoring in the subsequent round
- Usefulness of feedback sent to panel : 4.28/5

Identifying Outcome Measures for Specialty Pharmacists in Rheumatoid Arthritis Using the Delphi Method- Round 1 Results & Feedback				
Round 1 measure scoring				
Measure	Mean Importance	Mean Usability	Outcome	Feedback Page
Adherence	9.09	8.82	Met consensus for inclusion	5
Medication outcomes	8.18	7.81	Met consensus for inclusion	6
Patient response to therapy	7.92	7.48	Met consensus for inclusion	7
Safety screening	7.91			
Patient functional status	7.65			
Disease activity	7.40			
Patient quality of life	6.77			
Unplanned healthcare utilization	6.11			
Planned healthcare utilization	5.96			
Productivity	5.71			
How to use this document				
Review this document before and during yr the 3 measures that did not meet consensus				
Part 1 of the survey will ask you to again score measures that did not meet consensus (patient functional status, productivity, and unplanned healthcare utilization) on pages 2-4 before re-scoring these measures				
CONSENSUS NOT MET- WILL BE RE-SCORED IN ROUND 2				
Disease Activity				
Round 1 Mean Importance score: 7.4				
Round 1 Mean Usability score: 7.3				
Importance Comments		Usability Comments		
Low/Medium ( $\leq 6$ )		Low/Medium ( $\leq 6$ )		
		<ul style="list-style-type: none"> <li>Only usable if it triggers some kind of action.</li> <li>Provider input varies, variability on the ability to use this data to direct patient care</li> <li>May require additional staff time and training, new workflows, and modifications to software.</li> <li>Dependent on the consistency of patients' participation.</li> <li>prescriber/physician team primarily driving changes to therapy based on markers of disease</li> </ul>		
High ( $\geq 7$ )		High ( $\geq 7$ )		
<ul style="list-style-type: none"> <li>SPs well positioned to capture and monitor</li> <li>Can be used for research to improve RA care</li> <li>Important if a threshold or change or in absolute scoring that triggers some kind of action</li> <li>Increasingly important for Prior-Authorizations and Accreditation Requirements.</li> <li>Essential to assess treatment efficacy.</li> <li>More frequent touches with SP make the SP measurement much better from a timing standpoint.</li> <li>Need to be able to measure response systematically.</li> </ul>		<ul style="list-style-type: none"> <li>Data from marker of pt disease activity is not always helpful for pharmacist tx plan/rec. EX: it is a known progressive disease.</li> <li>Ideally, measures of disease activity are succinct.</li> <li>Patients not able to distinguish between RA and other comorbidities</li> <li>Well-positioned to measure this, but not always in clinic or able to order labs if needed</li> <li>Feedback from several providers that RAPID3 is less indicative of disease activity than other measures.</li> </ul>		

# Measure Evaluation


- Likert scale- 3, 5, 9, 10
- Scoring is typically based on “agreement”
- Chose to rank measures on two factors:
  - **Important/meaningful**
    - Defined as how meaningful the expert panel deems the measure to be for patient care
  - **Usable/actionable**
    - Defined by the National Quality Forum as the “extent to which potential audiences are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations”

1. Specialty pharmacies measuring **a marker of patient disease activity** (a marker that informs treat to target or achievement of remission, e.g., markers of inflammation, RAPID3, CDAI) is:

**Important**

\* must provide value

0- Not important      5- Somewhat important      10- Very important



Change the slider above to set a response

reset


Please provide any notes regarding the reasoning for your importance rating

Expand

**Usable**

\* must provide value

0 - Not usable      5 - Somewhat usable      10- Very usable



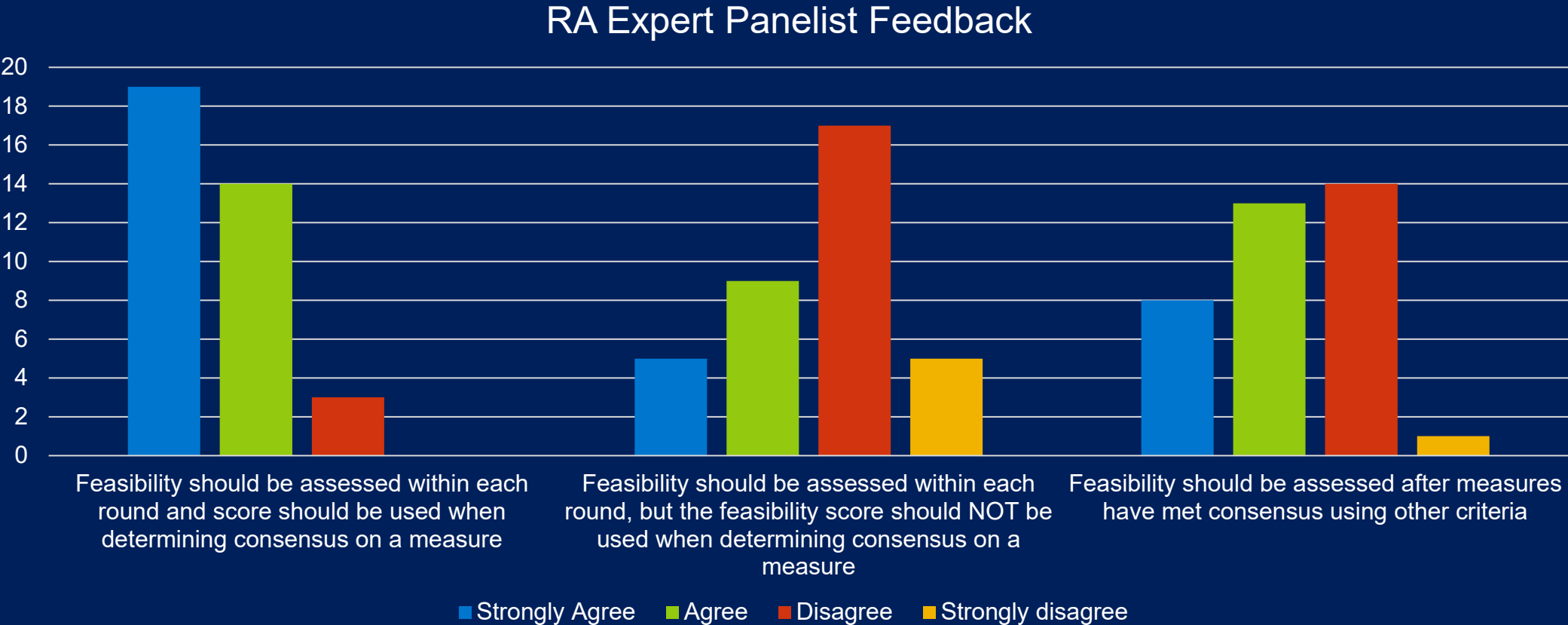
Change the slider above to set a response

reset

Please provide any notes regarding the reasoning for your usable rating

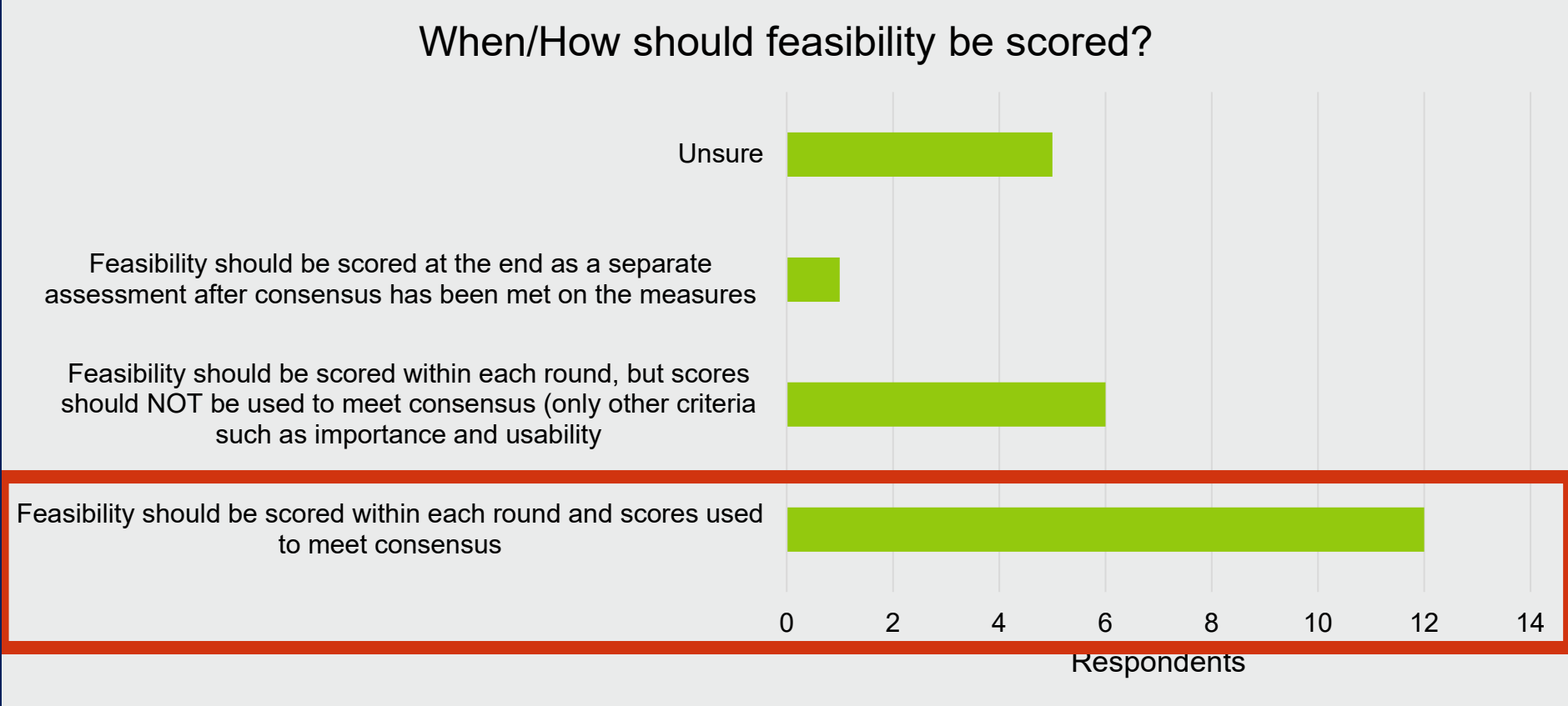
# Feasibility...

- Key aspect for implementation/uptake
- Considerations for contributing to consensus



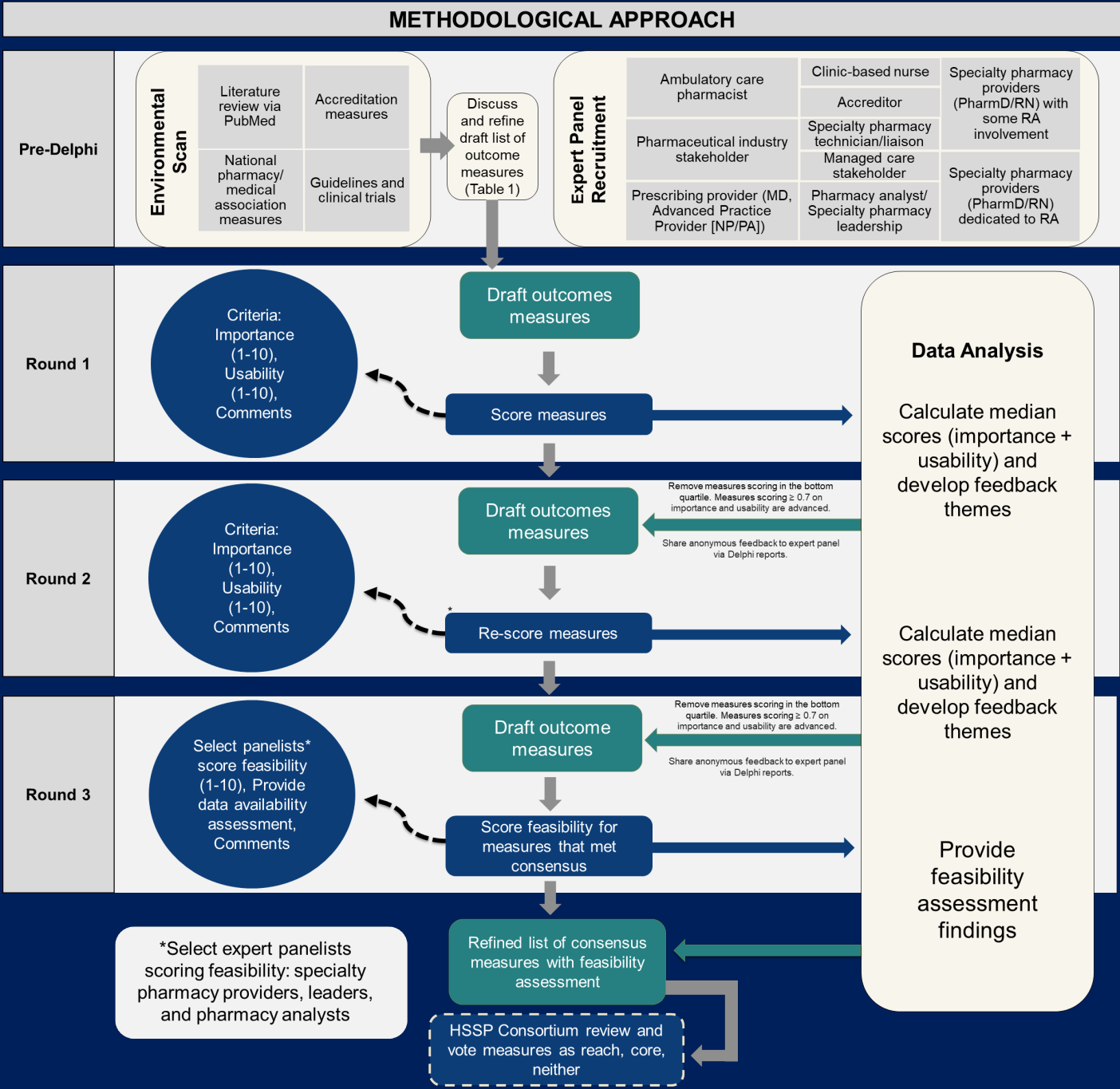
# Feasibility...

- IBD Study Group Voting

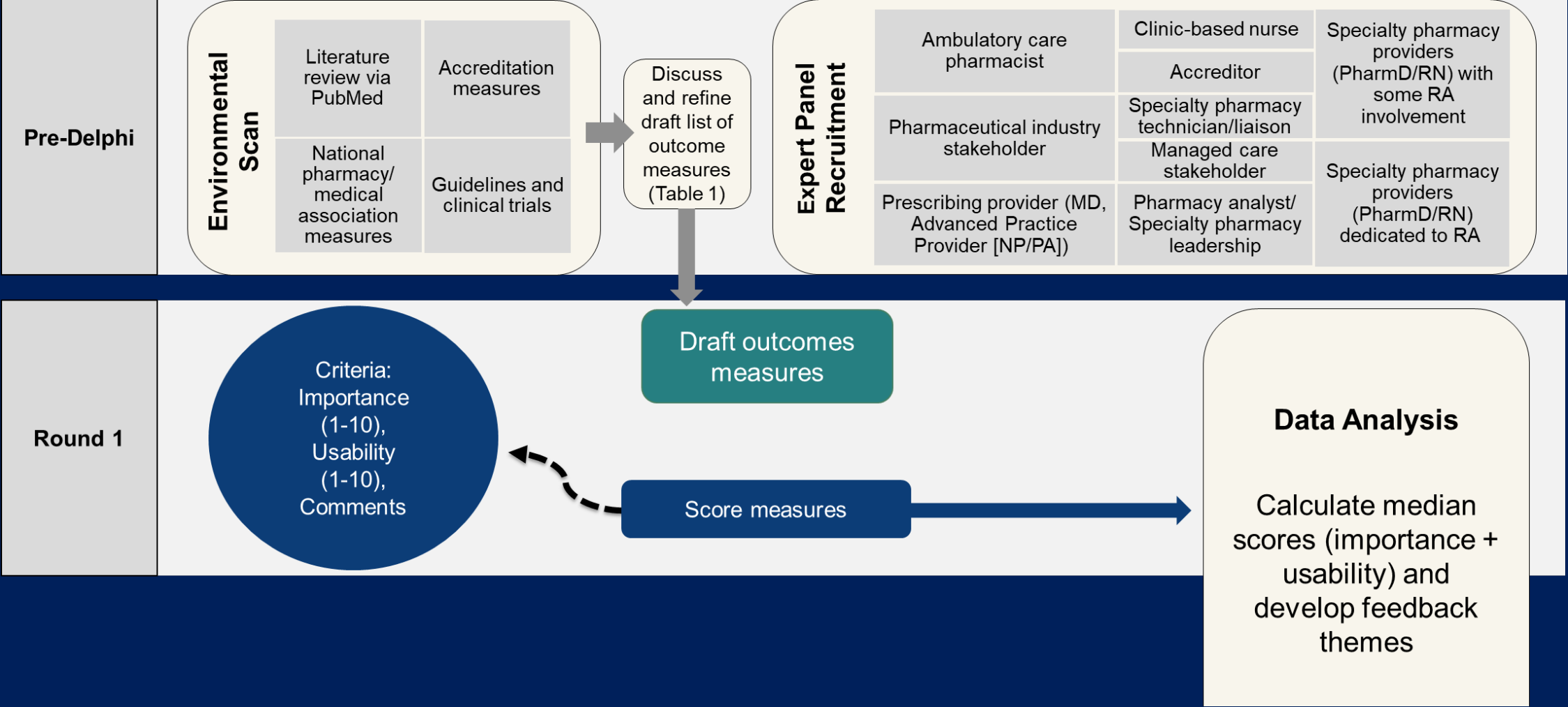


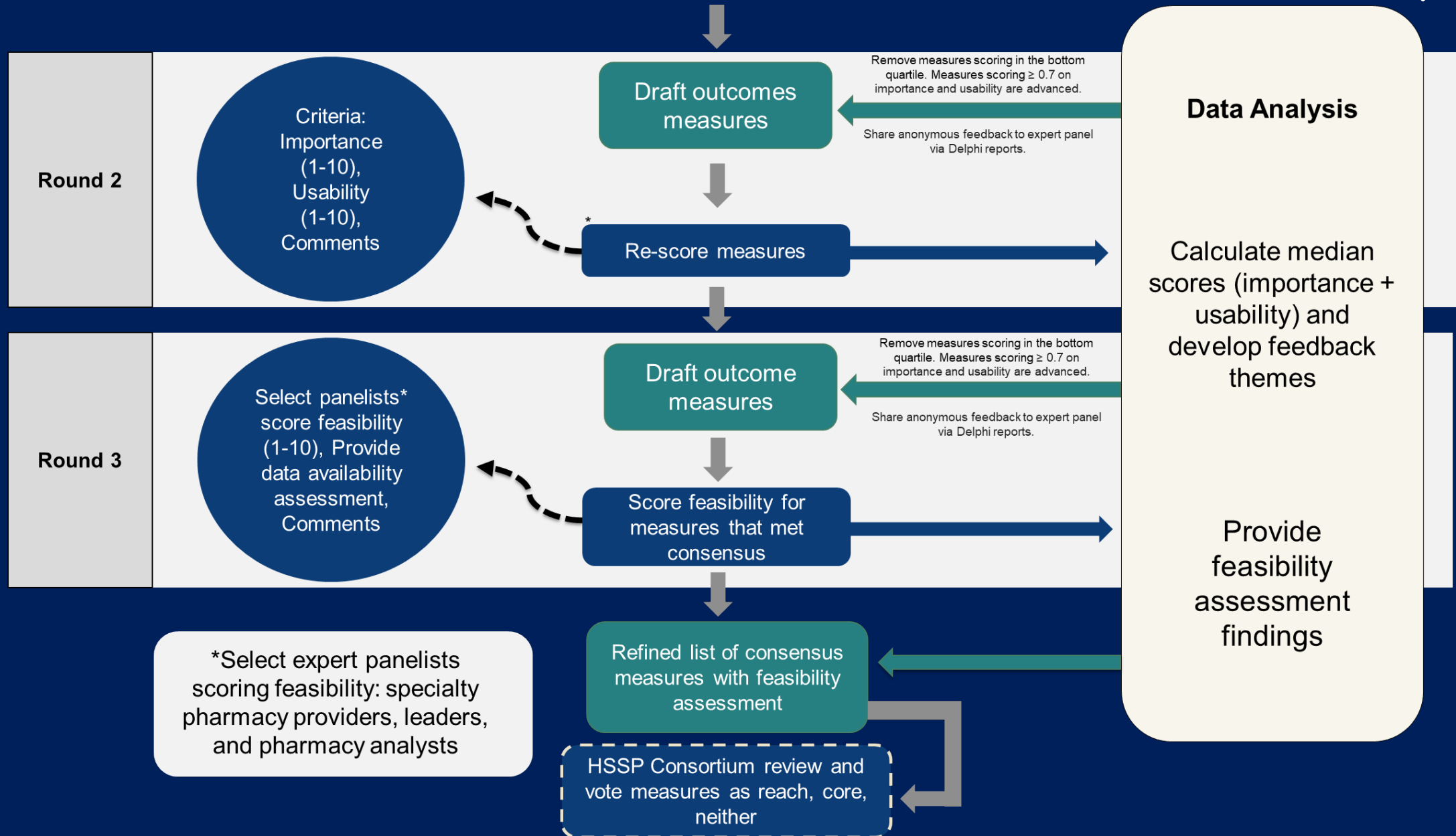
# Identifying Outcome Measures for Specialty Pharmacists in Rheumatoid Arthritis Using the Delphi Method

2024 - Results



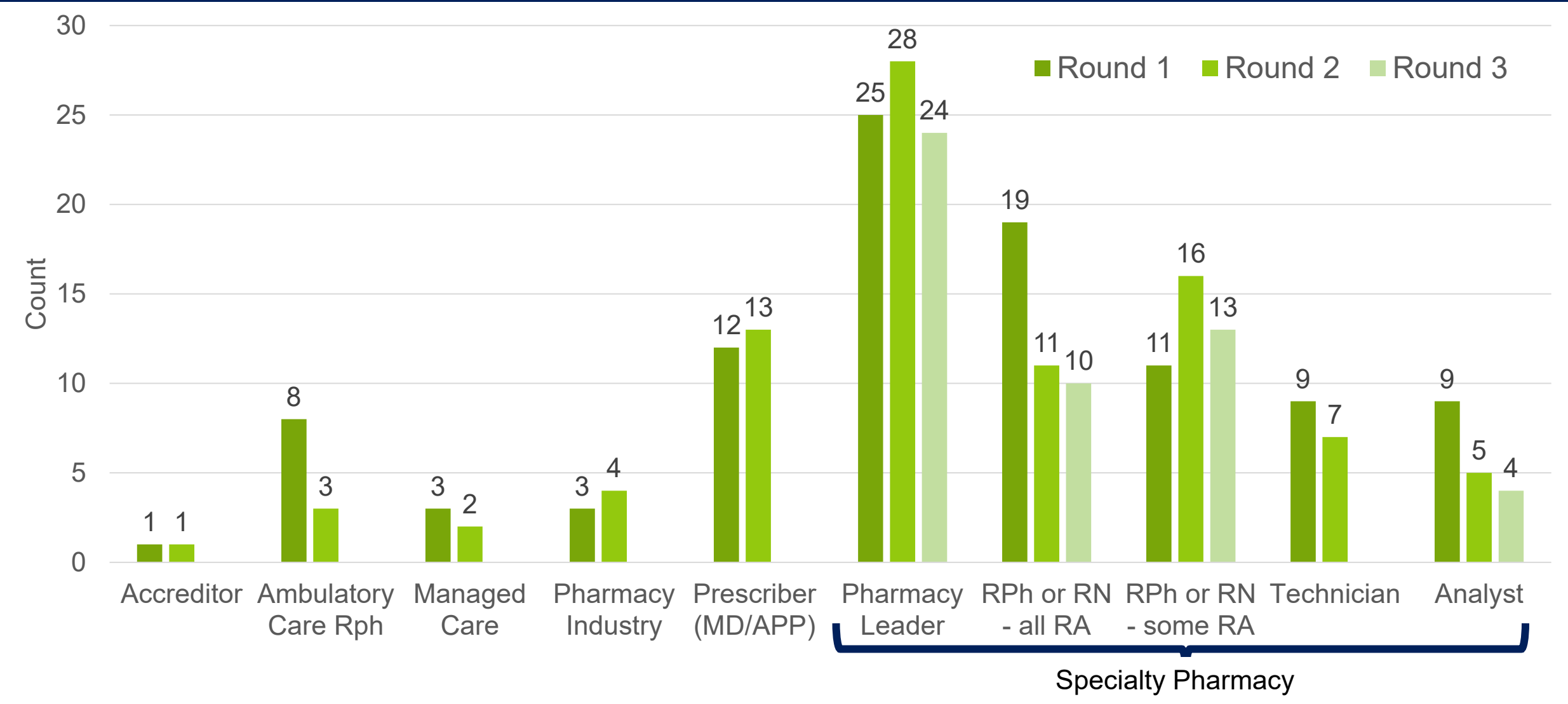
# METHODOLOGICAL APPROACH







# Stakeholder Survey Responses



# Round 1 - Importance & Usability

Measures
Adherence
Disease activity
Medication outcomes
Patient functional status
Patient quality of life
Patient response to therapy
Planned healthcare utilization
Productivity
Safety screening
Unplanned healthcare utilization



Remove measures scoring in the bottom quartile.

Measures scoring  $\geq 0.7$  on importance and usability are advanced.

Included
Adherence
Medication outcomes
Patient response to therapy
Safety screening
Uncertain
Patient functional status
Disease activity
Patient quality of life
Excluded
Unplanned healthcare utilization
Planned healthcare utilization
Productivity

# Round 2 - Importance & Usability

Uncertain
Patient functional status
Disease activity
Patient quality of life



Included
Patient functional status
Disease activity

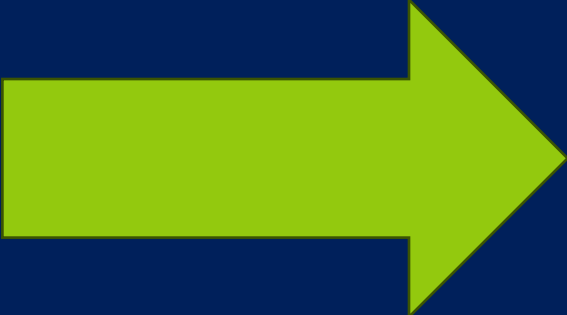
Remove measures scoring in the bottom quartile.

Measures scoring  $\geq 0.7$  on importance and usability are advanced.

Excluded
Patient quality of life

# Overall Importance & Usability

Measures
Adherence
Disease activity
Medication outcomes
Patient functional status
Patient quality of life
Patient response to therapy
Planned healthcare utilization
Productivity
Safety screening
Unplanned healthcare utilization



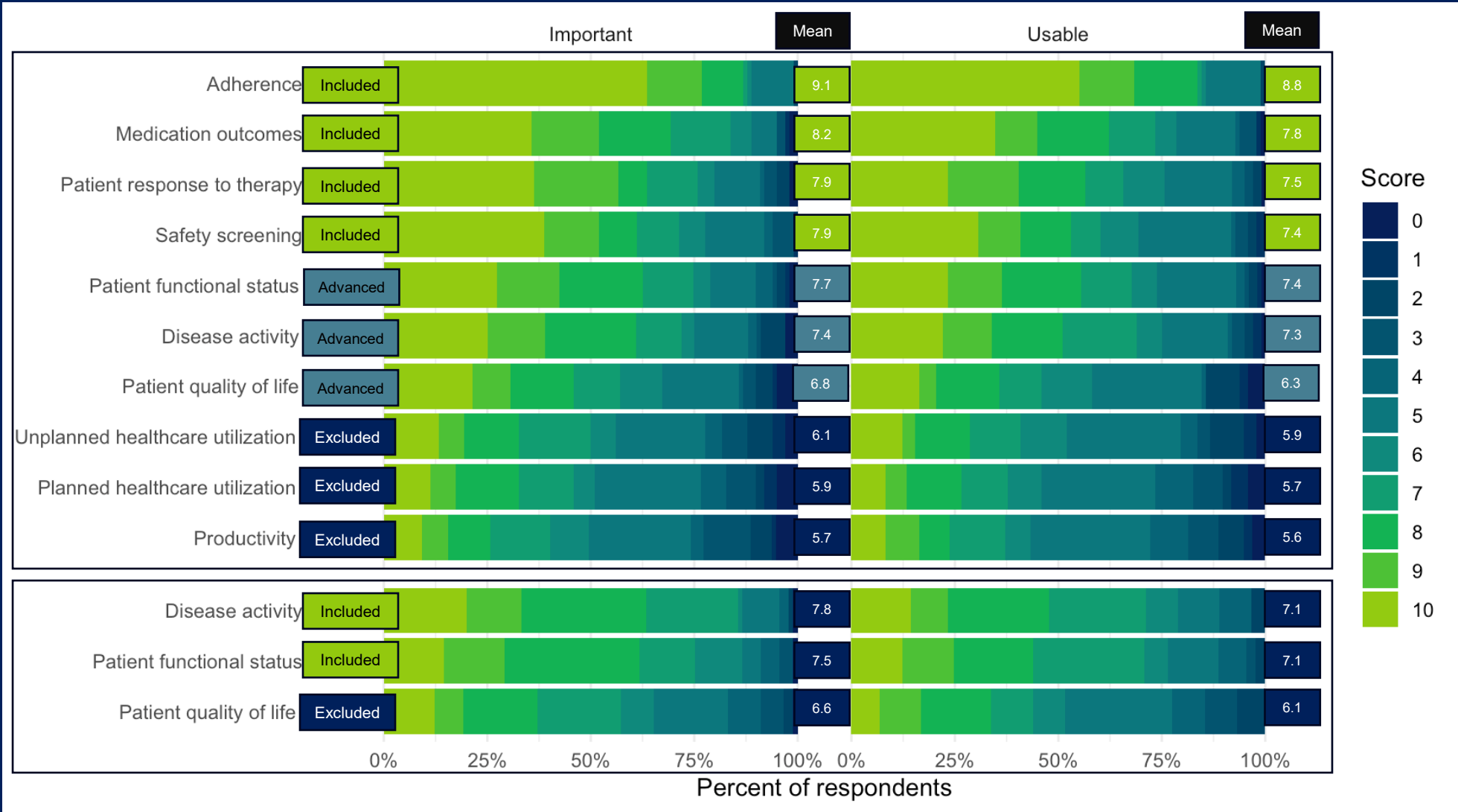
Included
Adherence
Medication outcomes
Patient response to therapy
Safety screening
Patient functional status
Disease activity

Excluded
Unplanned healthcare utilization
Planned healthcare utilization
Productivity
Patient quality of life

# Importance & Usability

Round 1

Round 2



# Round 2 – Measure Specifications

## 3. Patient response to therapy measures

**What should be captured related to patient response to therapy? (select all that apply)**

\* must provide value

☐ Documentation that patient response has been assessed
 ☐ Outcomes of patient response assessment
 ☐ Actions taken by the pharmacy to address patient response
 ☐ N/A- should not be measured by specialty pharmacies

**How should response to therapy be assessed? (select all that apply)**

\* must provide value

☐ Disease activity measure (e.g., clinical assessment [RAPID3], patient-reported question)
 ☐ Functional status measure (e.g., PGA, visual analog scale, patient reported question)
 ☐ Single patient question evaluating disease status (e.g., stable, better, worse)
 ☐ Treat to target progression based on patient goals (e.g., stable, better, worse)
 ☐ Persistence to medication/stopping or changing treatment
 ☐ Flare occurrence/frequency
 ☐ Unsure
 ☐ Other
 ☐ N/A- should not be measured by specialty pharmacies

**HOW SOON should response to therapy be measured by specialty pharmacies after treatment initiation (baseline)?**

\* must provide value

☐ Within 1 month
 ☐ Within 3 months
 ☐ Within 6 months
 ☐ Within 1 year
 ☐ Other
 ☐ Unsure
 ☐ N/A- should not be measured by specialty pharmacies

reset

**How often should response to therapy be measured by specialty pharmacies?**

\* must provide value

☐ Monthly
 ☐ Quarterly
 ☐ Every 6 months
 ☐ Annually
 ☐ Other
 ☐ Unsure
 ☐ N/A- should not be measured by specialty pharmacies

reset

# Round 2 – Measure Specifications

## Adherence

Specification	Preference
Documentation	<ul style="list-style-type: none"> <li>• <b>Actions taken by the pharmacy to address adherence (90%)</b></li> <li>• <b>Adherence scores (87%)</b></li> <li>• Documentation that adherence has been assessed (71%)</li> </ul>
Methods	<ul style="list-style-type: none"> <li>• <b>Patient-reported missed doses (83%)</b> captured monthly (60%)</li> <li>• PDC (77%) captured quarterly (51%)</li> </ul>

## Medication outcomes

Specification	Preference
Elements to capture / monitoring frequency	<ul style="list-style-type: none"> <li>• <b>Serious adverse events (90%)</b> measured/aggregated monthly (43%)</li> <li>• <b>Medication discontinuation (82%)</b> measured/aggregated quarterly (35%)</li> <li>• <b>Medication switching (75%)</b> measured/aggregated quarterly (28%)</li> <li>• Common Adverse Events (66%) measured/aggregated monthly (44%)</li> <li>• Specific medication persistence (64%) measured/aggregated either quarterly (32%) or every 6 months (30%)</li> </ul>

## Safety screening measures

Specification	Preference
Elements to capture	<ul style="list-style-type: none"> <li>• <b>Documentation that safety screening has been assessed (87%-96% for all elements)</b></li> </ul>
Screening to be captured / monitoring frequency	<ul style="list-style-type: none"> <li>• <b>TB screening (83%)</b> prior to initiation only (33%) or based on PI (35%)</li> <li>• <b>Drug-specific lab monitoring (77%)</b> based on package insert (57%)</li> <li>• <b>HBV screening (76%)</b> prior to initiation only (39%) or based on package insert (35%)</li> <li>• <b>Immunization screening (76%)</b> annually (49%)</li> </ul>

# Round 3 - Feasibility

Measure	Feasibility of COLLECTION % Moderate/very feasible	Feasibility of REPORTING % Moderate/very feasible	Current Elements Collected and/or Reported
Adherence	<b>Patient-reported: 98%</b> Any measure: 88% PDC: 82%	<b>Any measure: 92%</b> <b>Patient-reported: 88%</b> <b>PDC: 86%</b>	<b>Patient-reported: 86%</b> PDC: 77%
Medication outcomes	<b>Discontinuations: 92%</b> <b>Serious AEs: 86%</b> Switching: 82% Common AEs: 71% Medication Persistence: 71%	<b>Discontinuations: 84%</b> <b>Serious AEs: 78%</b> Switching: 75% Medication Persistence: 65% Common AEs: 63%	<b>Serious AEs: 86%</b> <b>Discontinuations: 73%</b> Switching: 63% Common adverse events: 63% Medication persistence: 39%
Safety screening	<b>TB screening: 90%</b> <b>HBV screening: 88%</b> <b>Drug-specific labs: 80%</b> Immunization screening: 78%	<b>TB screening: 82%</b> <b>HBV screening: 78%</b> Drug-specific labs: 67% Immunization screening: 65%	<b>TB screening: 88%</b> <b>HBV screening: 80%</b> Drug-specific labs: 67% Pregnancy: 55% Infection risk assessment: 51% Immunization screening: 49% HCV screening: 47% Cardiovascular risk: 31%

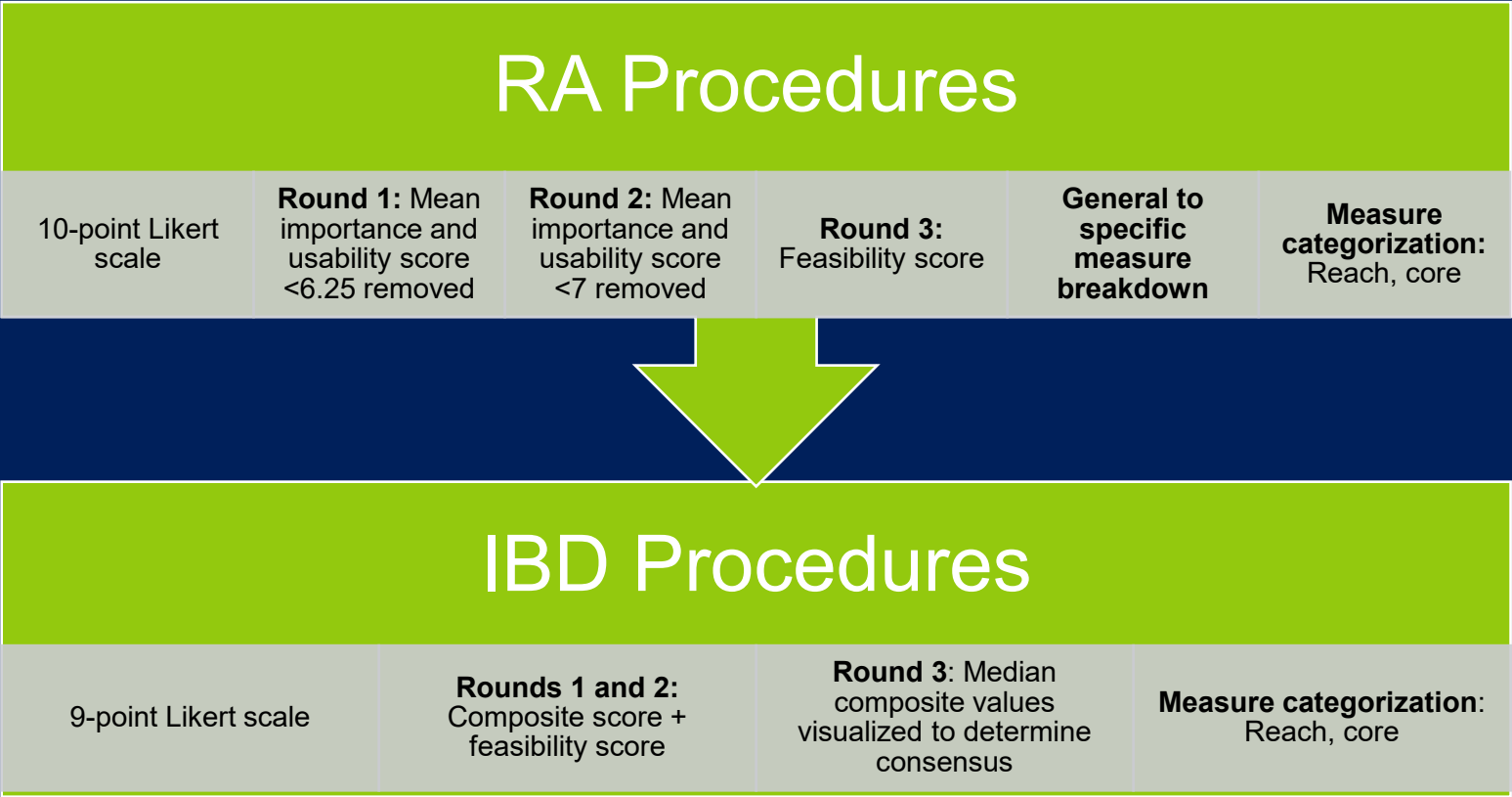


# Final Measures

<b>Adherence (any measure)</b>	<b>Safety screening</b>
<b>Medication outcomes</b>	<b>TB screening</b>
<b>Discontinuations</b>	<b>HBV screening</b>
<b>Serious adverse events</b>	<b>Immunization screening</b>
<b>Common adverse events</b>	<b>Drug-specific lab screening</b>
<b>Medication switches</b>	<b>Patient functional status</b>
<b>Medication persistence</b>	<b>Disease activity</b>
<b>Patient response to therapy</b>	

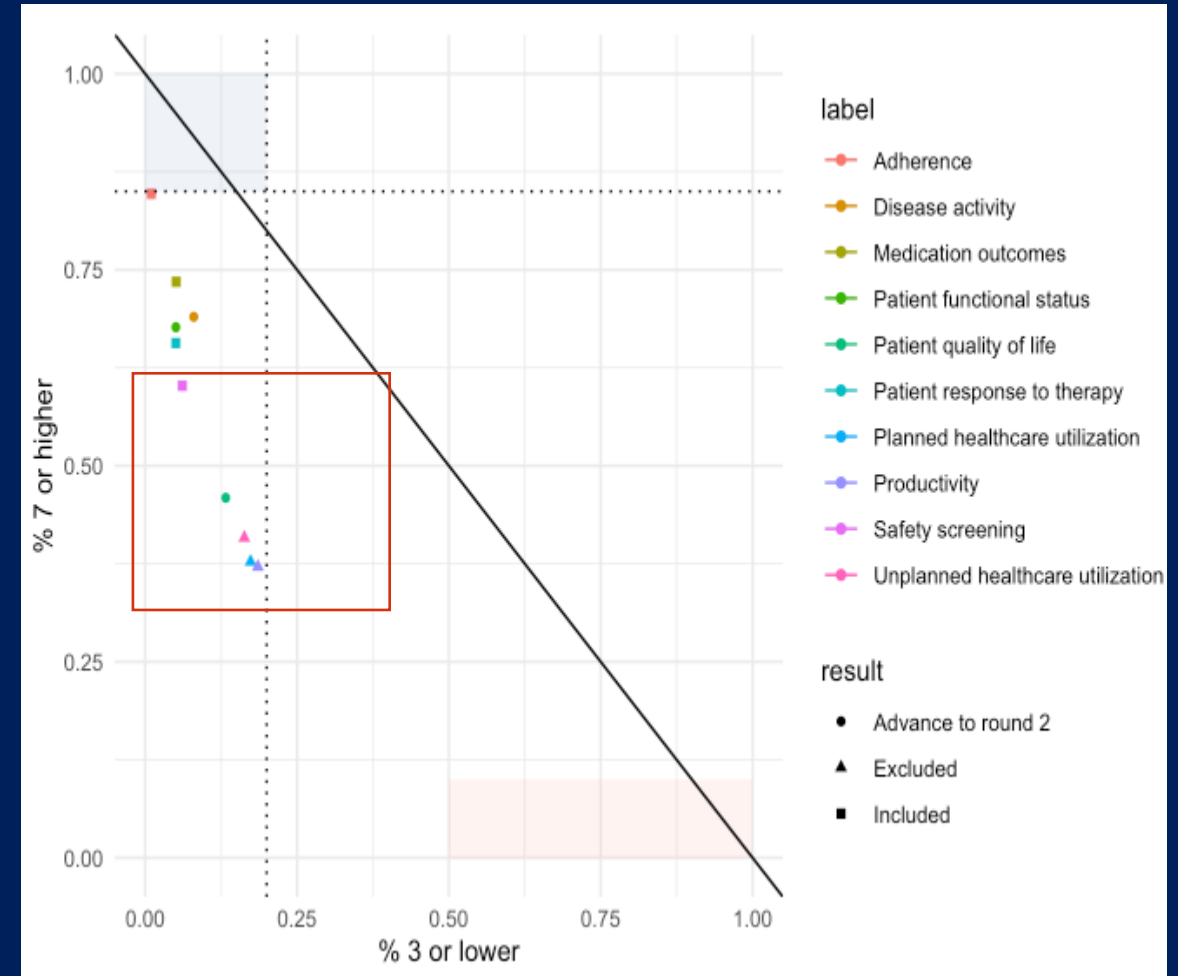
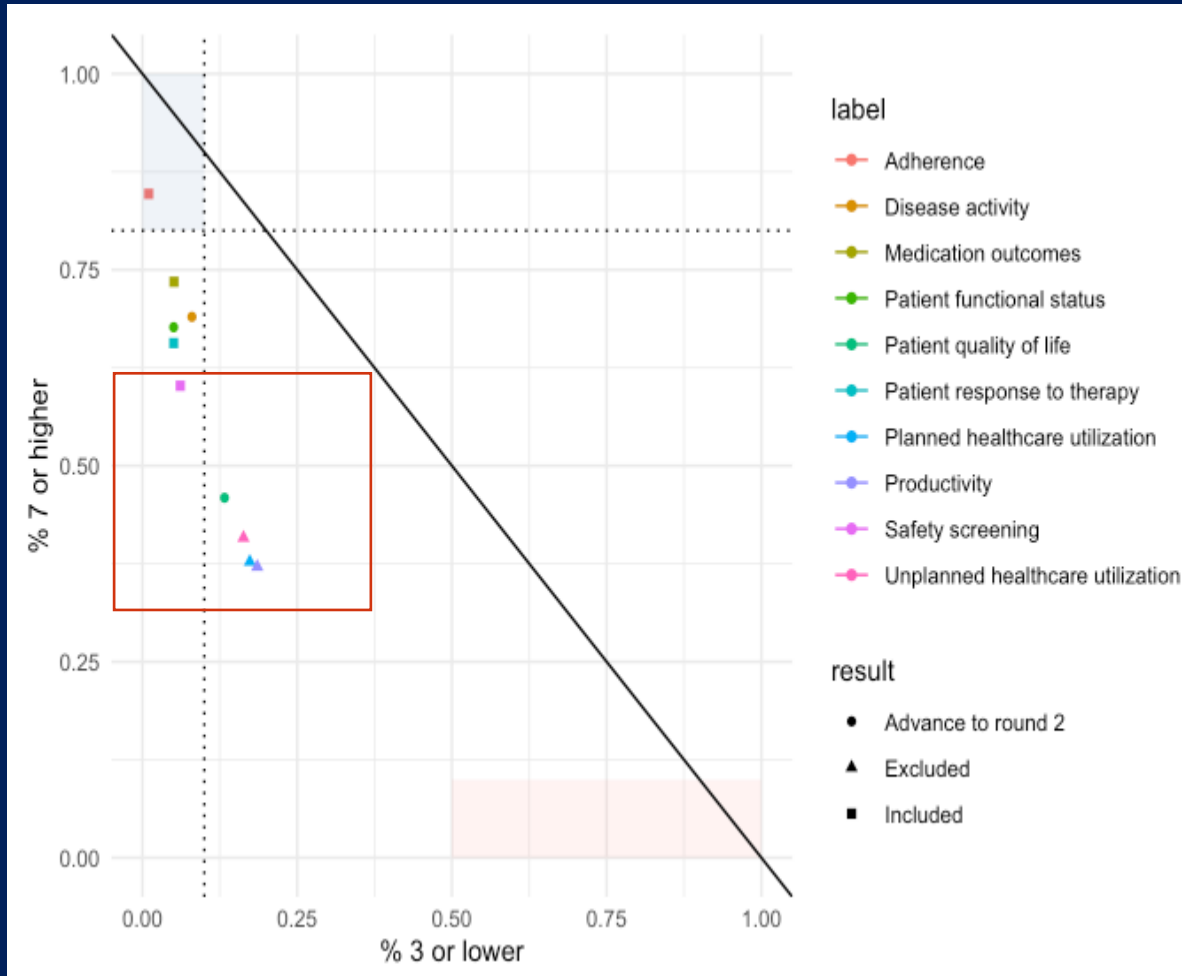
# Determining Consensus

- Scoring measures
  - Importance score
  - Usability score
  - Feasibility score
  - Composite score
- Consider use
- Optimal number of rounds 2-3<sup>1</sup>



1. Sarah Drumm, Catriona Bradley, Frank Moriarty, 'More of an art than a science'? The development, design and mechanics of the Delphi Technique, Research in Social and Administrative Pharmacy, Volume 18, Issue 1, 2022, Pages 2230-2236, ISSN 1551-7411, <https://doi.org/10.1016/j.sapharm.2021.06.027>.

# More of an Art



# Determining Consensus- Planned IBD Analysis

Round 1		
	Composite score (lowest of importance and usability)	Feasibility
Included- no further scoring	Median score ≥7	At least 90% score ≥4
Uncertain- included for voting in Round 2	Median score 4-6	At least 50% score ≥4
Eliminated- no further scoring	Median score 1-3	More than 50% score <4

Round 2		
	Composite score (lowest of importance and usability)	Feasibility
Included- no further scoring	Median score ≥6.5	At least 80% score ≥4
Uncertain- included for voting in Round 3	Median score 4-6.5	At least 50% score ≥4
Eliminated- no further scoring	Median score 1-3	More than 50% score <4



Round 3

After scoring from round 3, **median composite values will be visualized** to determine an appropriate level of consensus based on results. Measures must have at least a median feasibility score of 5 to be considered for inclusion.

# Final Determination

- Study group voting
- Core
  - Defined as measures that should be collected and reported by all specialty pharmacies **without exception**
- Reach
  - Deemed important and actionable but **not yet essential** for specialty pharmacies to collect and report

## Final Outcome Measure Voting by Consortium Study Group Members

[Returning?](#)

AAA

+

**Introduction:**

The modified Delphi method study executed over the last year used a multistakeholder expert consensus on measures that are important and actionable to be used in specialty pharmacy practice. Six of the ten initial measures drafted by the Consortium study group met consensus for inclusion; the remaining four met consensus for exclusion.

As a final step in the modified Delphi method study, Consortium workgroup members who participated in the review and environmental scan are invited to VOTE on the six remaining measures to recommend core, reach, or neither.

Of note, though only 6 measures met consensus, the initial measure "medication outcome" had those medication outcomes that were most commonly scored as feasible and/or already collected. This measure has been delineated into specific screenings that were scored highly for feasibility. **We will evaluate 13 potential final measures.**

**Purpose of this survey:**

The purpose of this survey is to determine whether selected elements should be categorized as core, reach, or neither based on their perceived relevance and impact on patient care.

**Core:** core measures are those that should be collected and reported by all specialty pharmacies. They are considered fundamental to providing specialty pharmacy services for patients with ROP.

**Reach:** reach measures are those that are deemed important and usable, but not yet essential to collect and report. The benefits of these measures are recognized, yet they may be less feasible.

**Neither:** measures that workgroup members do not believe should be collected or reported by specialty pharmacies should be marked as neither. This selection indicates the workgroup member does not think the measure is important or usable in practice.

**Survey instructions**

- We encourage you to review expert panelist feedback from rounds 2 and 3 below prior to voting.
- You will evaluate each element (N=13) and determine if it should be classified as core, reach, or neither.
- This survey is anticipated to take 5-7 minutes to complete. You may save and return at any time.

**Additional resources:**

[Round 2 Results and Expert Panel Feedback.pdf](#)

[Round 3 Results and Expert Panel Feedback.pdf](#)

Please categorize each element as core, reach, or neither.

	Core	Reach	Neither	
1) Adherence (any measure) <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
2) Discontinuations <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
3) Serious adverse events (AEs) <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
4) Medication switches <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
5) Medication persistence <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
6) Common AEs <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
7) Patient response to therapy (any measure) <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
8) TB screening <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
9) HBV screening <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
10) Drug-specific lab screening <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
11) Immunization screening <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
12) Patient functional status (any measure) <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
13) Patient disease activity (any measure) <small>* must provide value</small>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
14) Please provide any notes regarding the reasoning of your measure categorization.				

# Core or Reach Measures

Element	Categorization		
	Core	Reach	Neither
Adherence (any measure)	18	0	0
Serious adverse events (AEs)	17	1	0
Patient response to therapy (any measure)	16	2	0
Discontinuations	14	4	0
TB screening	13	4	1
HBV screening	13	4	1
Medication switches	11	7	0
Immunization screening	8	7	3
Drug-specific lab screening	8	7	3
Common AEs	8	7	3
Patient functional status (any measure)	5	12	1
Patient disease activity (any measure)	4	14	0
Medication persistence	4	14	0

# Stakeholder Feedback

General agreement on importance / usability of metrics

- Exception: prescribers commenting on elements that are less traditionally roles of pharmacists
  - “Not the pharmacy’s role”
  - “This seems intrusive”

36 comments about elements being useful or important for prior authorizations or insurance coverage

- None from managed care stakeholders

# Determining Consensus Lessons Learned

- Guidelines for determining consensus are vague
  - Modeling can help
  - Consider study purpose
- Feasibility is essential (for this work)
- If scoring expands beyond agreement, fewer variables are easier
- Additional specifications should be based on expert panelist role (potentially)
- Stakeholder feedback themes are useful

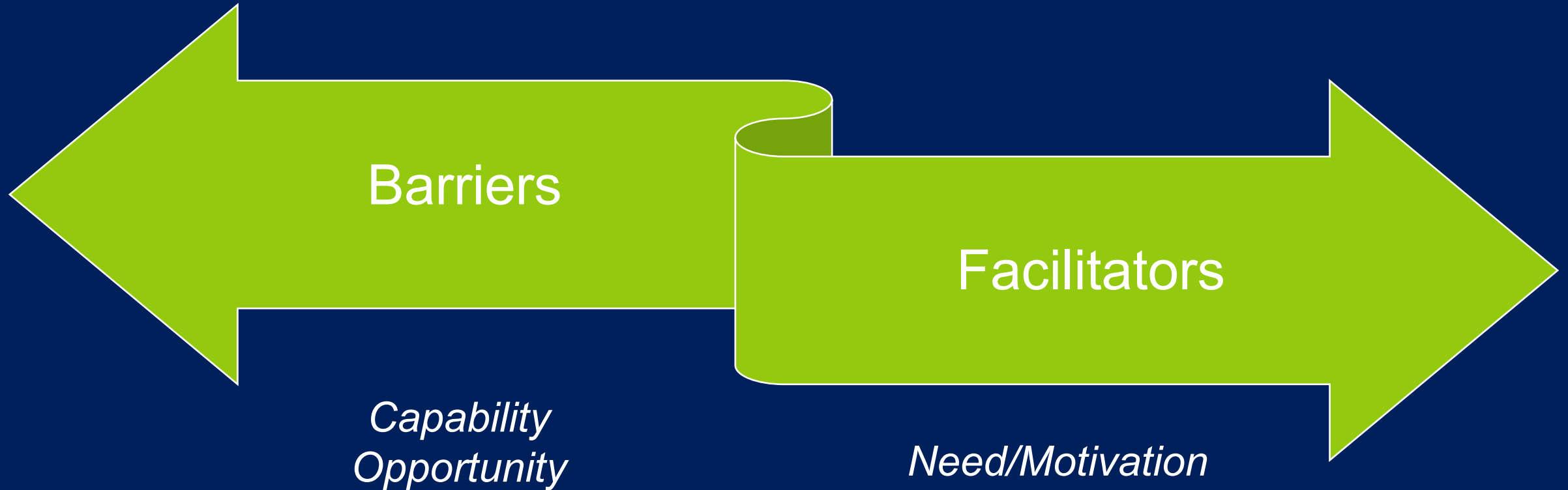




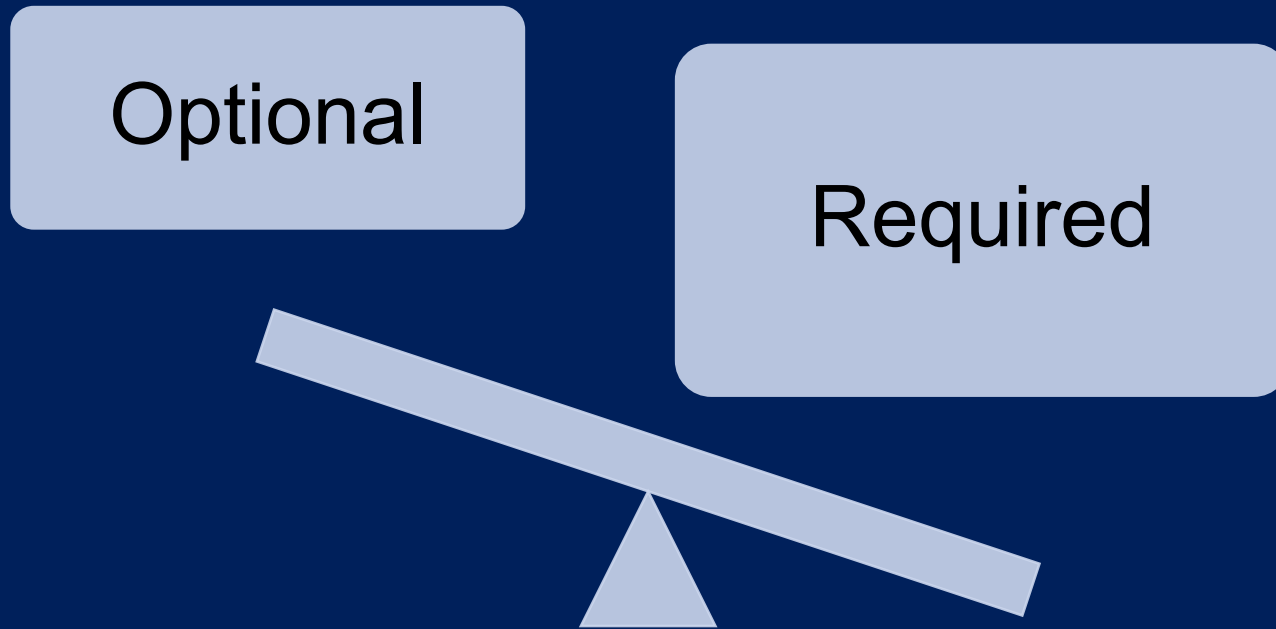
# Implementation Challenges

Measures	Collected discretely	Collected- limited or non-discrete	Not collected
Adherence	14	1	0
Serious AEs	9	6	0
Patient response to therapy	8	7	0
Medication discontinuations	10	4	1
TB screening	11	3	1
HBV screening	9	5	1
Medication switches	2	11	2
Medication persistence	6	3	6
Common AEs	5	9	1
Drug-specific lab screening	9	3	3
Immunization screening	8	6	1
Patient functional status	4	7	4
Patient disease activity	8	4	3

# Implementation Challenges



# Implementation Challenges



Pharmacies prioritize required reporting elements over optional elements

## *Opportunities:*

- Partnerships
- Meaningful data contracts
- Elevate practice and patient care

# What's next?

## RA Study

- Sharing Results
- Encourage Implementation

## IBD Study

- Environmental scan is underway
- Surveys later this year

Other disease states?

# Key Takeaways

- Specialty pharmacies are capable and willing to report measures that are important and meaningful to manage specialty pharmacies, but implementation barriers exist.
- The modified Delphi method can be used to reach consensus about what measures should be collected and reported by specialty pharmacies and can help steer the field of specialty pharmacy.
- Managed care stakeholders should participate in developing consensus on meaningful measures in specialty pharmacies and use these measures to evaluate specialty pharmacy performance and selection.

# Open Discussion

- Feedback on use cases presented?
  - Stakeholders
  - Measure evaluation
  - Rounds
- Delphi Method- use cases and ideas for future use?

# Post-Test



## Polling Question

**LQ1: Which of the following best describes the current state of outcome measurement and reporting in specialty pharmacy?**

- a) Primarily focuses on operational metrics
- b) Efficiently performed structured data from one source
- c) Measures are rarely measured or reported, and there is little emphasis on improving this area
- d) Limited to accreditation measures only



## Polling Question

**LQ1: Which of the following best describes the current state of outcome measurement and reporting in specialty pharmacy?**

- a) Primarily focuses on operational metrics**
- b) Efficiently performed structured data from one source
- c) Measures are rarely measured or reported, and there is little emphasis on improving this area
- d) Limited to accreditation measures only

**CORRECT RESPONSE: A**

**BRIEF EXPLANATION: B- data is often structured and unstructured and from multiple sources; C- Specialty pharmacies have a large amount of outcomes reporting and want to improve; D- Measures are reported to multiple stakeholders**

## Polling Question

**LQ2: Which of the following is a key lesson learned from using the modified Delphi methodology to determine consensus on meaningful measures in specialty pharmacy practice?**

- a) It is ineffective in achieving consensus among experts
- b) There are clear guidelines for how to determine consensus
- c) Engaging a diverse panel of experts makes consensus easier to achieve.
- d) It is helpful to determine the specificity of planned measures prior to engaging experts.

## Polling Question

**LQ2: Which of the following is a key lesson learned from using the modified Delphi methodology to determine consensus on meaningful measures in specialty pharmacy practice?**

- a) It is ineffective in achieving consensus among experts
- b) There are clear guidelines for how to determine consensus
- c) Engaging a diverse panel of experts makes consensus easier to achieve.
- d) It is helpful to determine the specificity of planned measures prior to engaging experts.**

CORRECT RESPONSE: D

BRIEF EXPLANATION: A- this method can successfully lead to consensus; B- clear guidelines are not available and approaches should be based on purpose; C- consensus may be harder with a more diverse panel

## Polling Question

**LQ3: Which of the following measures were excluded as a result of the first survey round in the modified Delphi study to identify outcome measures for specialty pharmacists in rheumatoid arthritis?**

- a) Adherence
- b) Medication outcomes
- c) Unplanned healthcare utilization
- d) Safety screening

## Polling Question


**LQ3: Which of the following measures were excluded as a result of the first survey round in the modified Delphi study to identify outcome measures for specialty pharmacists in rheumatoid arthritis?**

- a) Adherence
- b) Medication outcomes
- c) Unplanned healthcare utilization**
- d) Safety screening

**CORRECT RESPONSE: C**

**BRIEF EXPLANATION:** Adherence, medication outcomes, and safety screening were identified for *inclusion* after the first round of surveys. Unplanned healthcare utilization, planned healthcare utilization, and productivity met consensus for exclusion during the first round.

# Questions



AMCP Nexus 2025  
Continuing Pharmacy Education Sessions  
Call for Proposals is open!  
Please visit [amcpnexus.org](https://amcpnexus.org) for more information.



**Access Code:**  
**RTZUYS**

Instructions to claim CPE can  
be found on the app