

IMPROVED WEIGHT MANAGEMENT IN TEAM-BASED PRIMARY CARE

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Initial Development of Planning Framework

Team

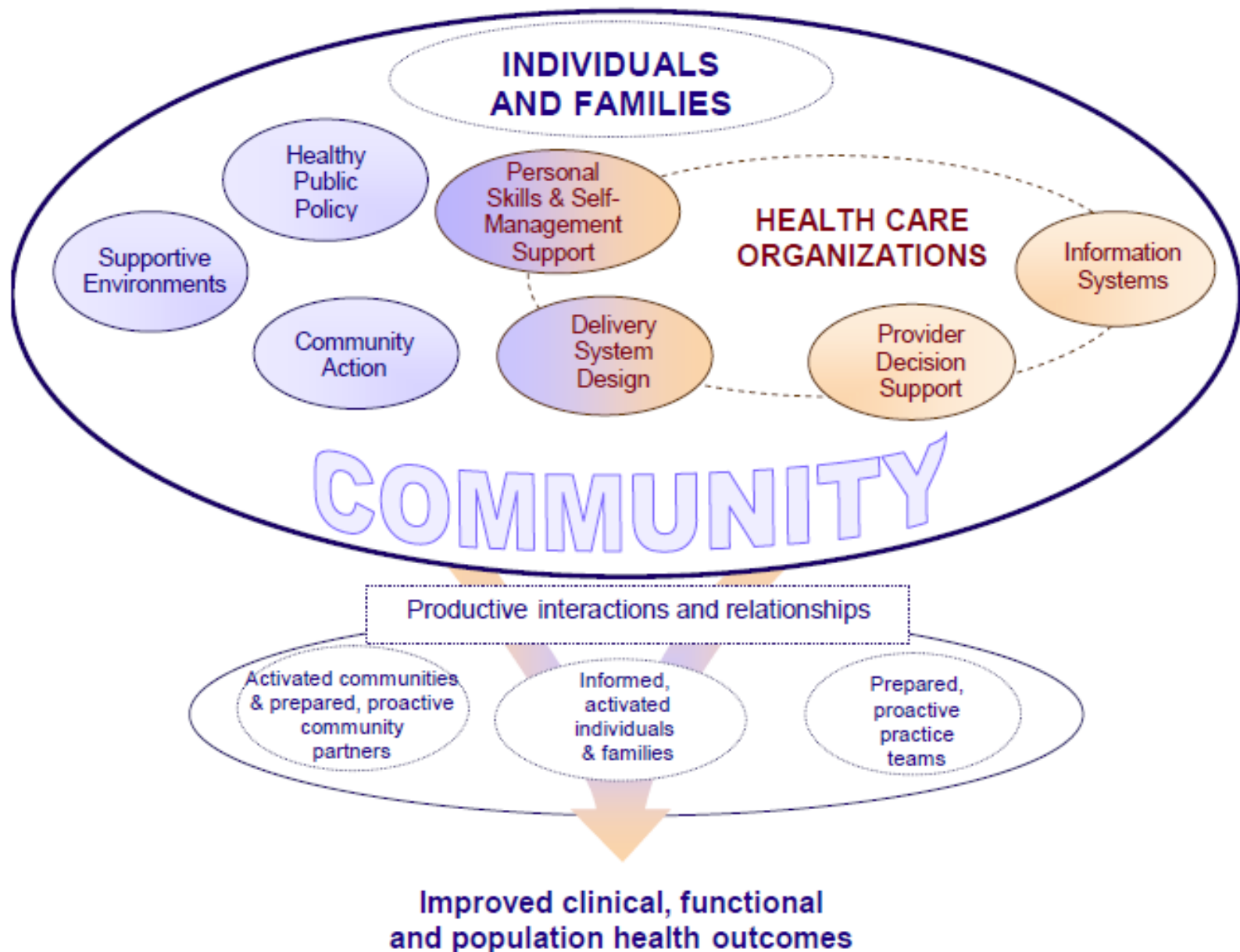
- Decision Maker - Nick Kates, QIIP
- Co-investigators
 - Tracy Hussey, John Dwyer, Michelle Edwards, Rick Goy
 - Ross Kirkconnell, Heidi Smith
- Coordinator - Dawna Royall
- MSc - Olivia O'Young, Carol Haberman
- Undergraduate students and other helpers!

- Funding – CIHR Knowledge to Action

Purpose

- Draft flexible planning framework for obesity management in team-based primary care
- Logic model linking activities with desired outcomes for specific target groups
- Based on:
 - Chronic Care Model
 - WHO planning framework for prevention of chronic disease
 - MRC (UK) guide to developing and evaluating complex interventions.

Ontario's Chronic Disease Prevention and Management Framework



The **stepwise** framework

1

PLANNING STEP 1

Estimate population need and advocate for action

2

PLANNING STEP 2

Formulate and adopt policy

3

PLANNING STEP 3

Identify policy implementation steps

Policy implementation steps	Population-wide interventions		Interventions for individuals
	National level	Sub-national level	
Implementation step 1 CORE	Interventions that are feasible to implement with existing resources in the short term.		
Implementation step 2 EXPANDED	Interventions that are possible to implement with a realistically projected increase in, or reallocation of, resources in the medium term.		
Implementation step 3 DESIRABLE	Evidence-based interventions which are beyond the reach of existing resources.		

Developing and evaluating complex interventions: new guidance

Prepared on behalf of the Medical Research Council by:

Peter Craig, MRC Population Health Sciences Research Network

Paul Dieppe, Nuffield Department of Orthopaedic Surgery, University of Oxford

Sally Macintyre, MRC Social and Public Health Sciences Unit

Susan Michie, Centre for Outcomes Research and Effectiveness, University College London

Irwin Nazareth, MRC General Practice Research Framework

Mark Petticrew, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine

www.mrc.ac.uk/complexinterventionsguidance

Activities

- Identify promising strategies from:
 - Scoping review
 - Focus groups of providers and patients
 - Hamilton Family Health Team
- Review and develop draft
 - Consensus process
 - Queens Decision Centre
 - Guelph Family Health Team

Scoping Review (Arksey & O'Malley, 2005)

- Systematic Lit Review vs. Scoping Review
 - Both rigorous and transparent
 - Narrow vs. Broad research questions
 - Quality assessment vs. NO quality assessment

- **“Augmented” Scoping Review**
 - QA on quantitative intervention studies



Criteria

- Relevant or potentially relevant to primary care
- Focus - Lifestyle, diet and/or PA
- Diet/activity or BMI and/or other outcomes
- All study designs
 - Intervention
 - Organization of care
 - Patient or Provider perspectives
- Varying age groups
- Varying health status

Search Strategy- search databases

- Studies published:
 - English
 - **Jan 2003 and June 2009**

Databases:

- PUBMED (Medline)
- CINAHL
- Cochrane Central Register of Controlled Trials
- SCI-Expanded



Search Strategy- search terms

Non-Drug Treatments

- Nutrition therapy
- Primary prevention
- Secondary prevention
- Health promotion
- Exercise
- Self-care
- Lifestyle
- Behavior therapy
- Self-efficacy

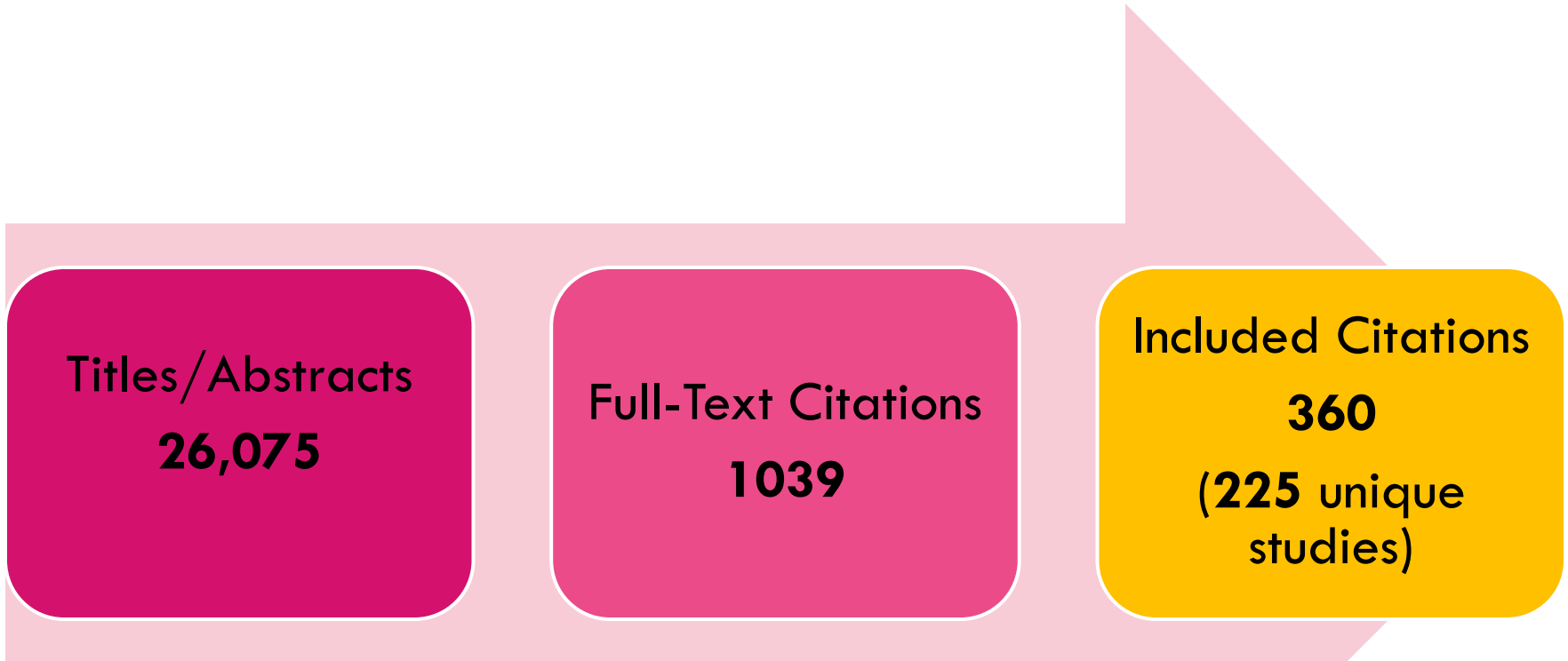
Obesity/Overweight

- Overweight
- Body weight
- Diabetes mellitus
- Chronic disease
- Dyslipidemia
- Hypertension
- Coronary disease
- Cardiovascular diseases
- Body mass index

Primary Care

- Primary health care
- Family physicians
- Nurses
- Allied health personnel
- Health educators
- Dietitians
- Multidisciplinary care team

Initial Screening Process



****Note- additional citations (related to a given study) were retrieved and reviewed where applicable*

Quality Assessment

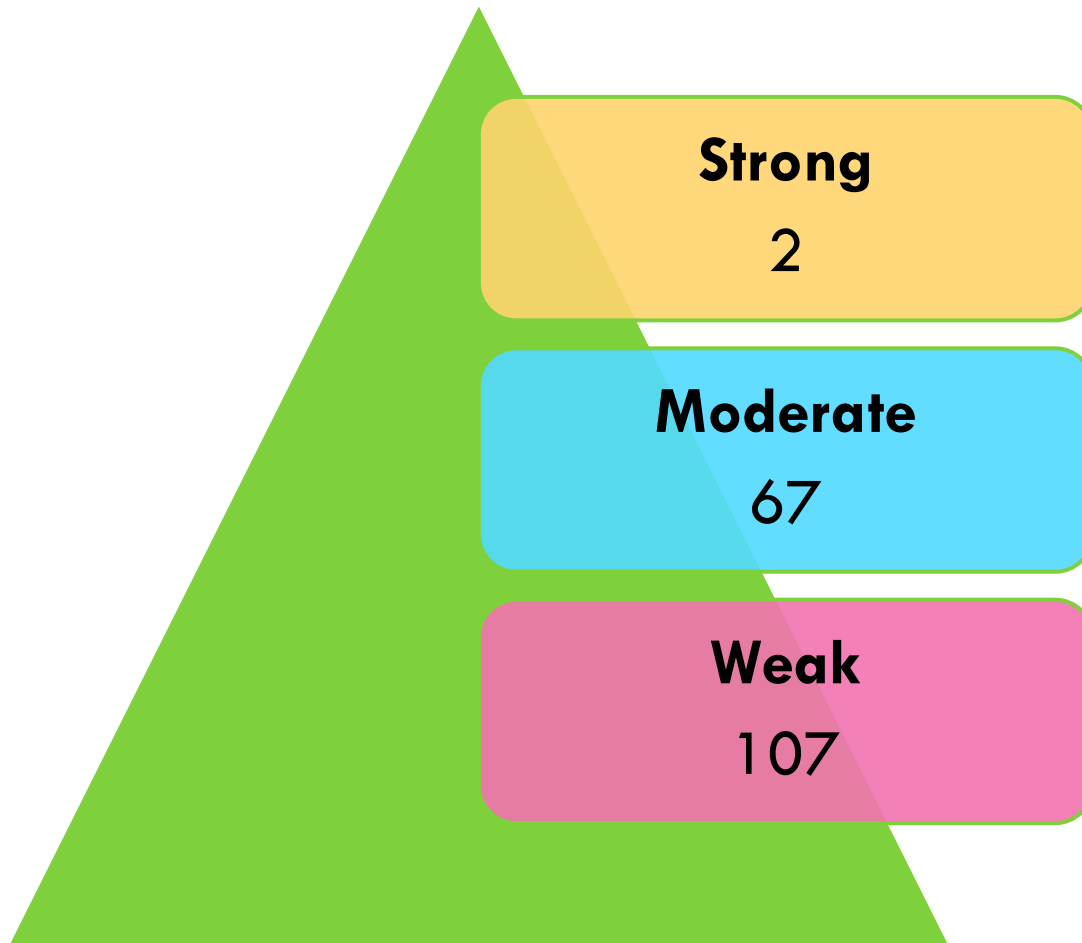
(Public Health Research, Education & Development)

- A) Selection Bias
- B) Study Design
- C) Confounders
- D) Blinding
- E) Data Collection Methods
- F) Withdrawals & Drop-outs

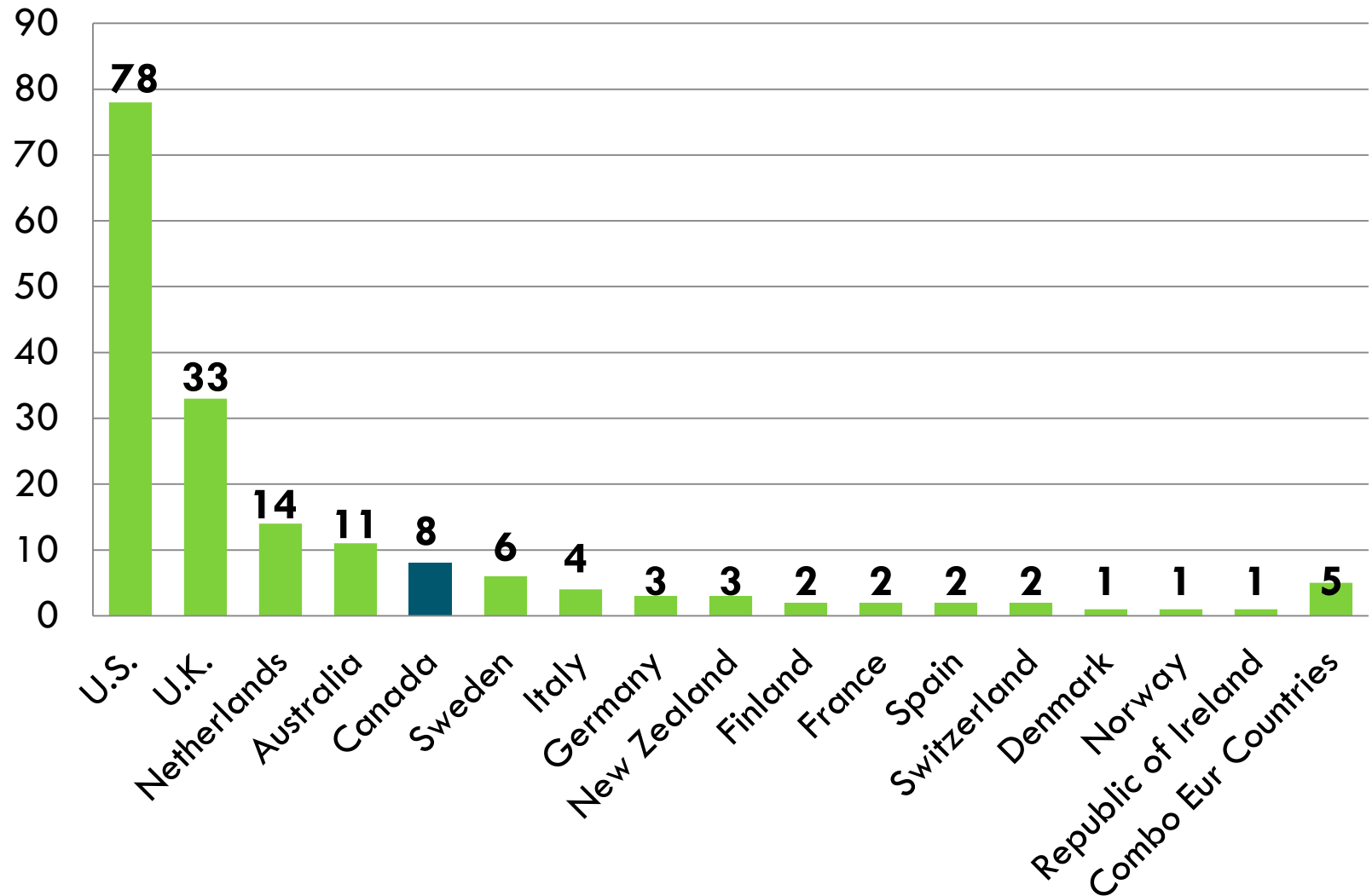
Strong
Moderate
Weak

(City of Hamilton, 2007)

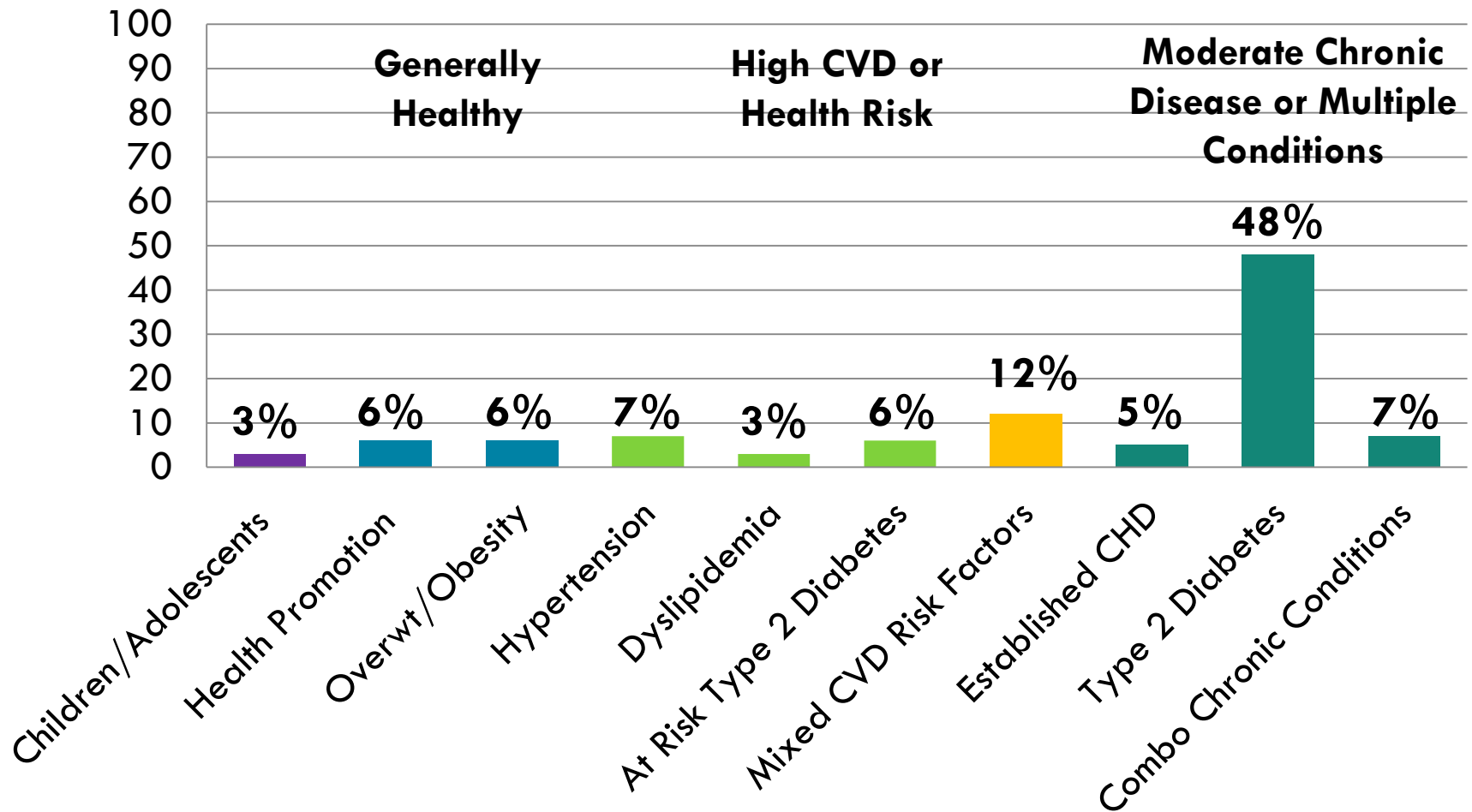
Quality Assessment of Intervention Studies (n=176)



Studies by Country of Origin (n=176)



% Studies by Unique Target Groups



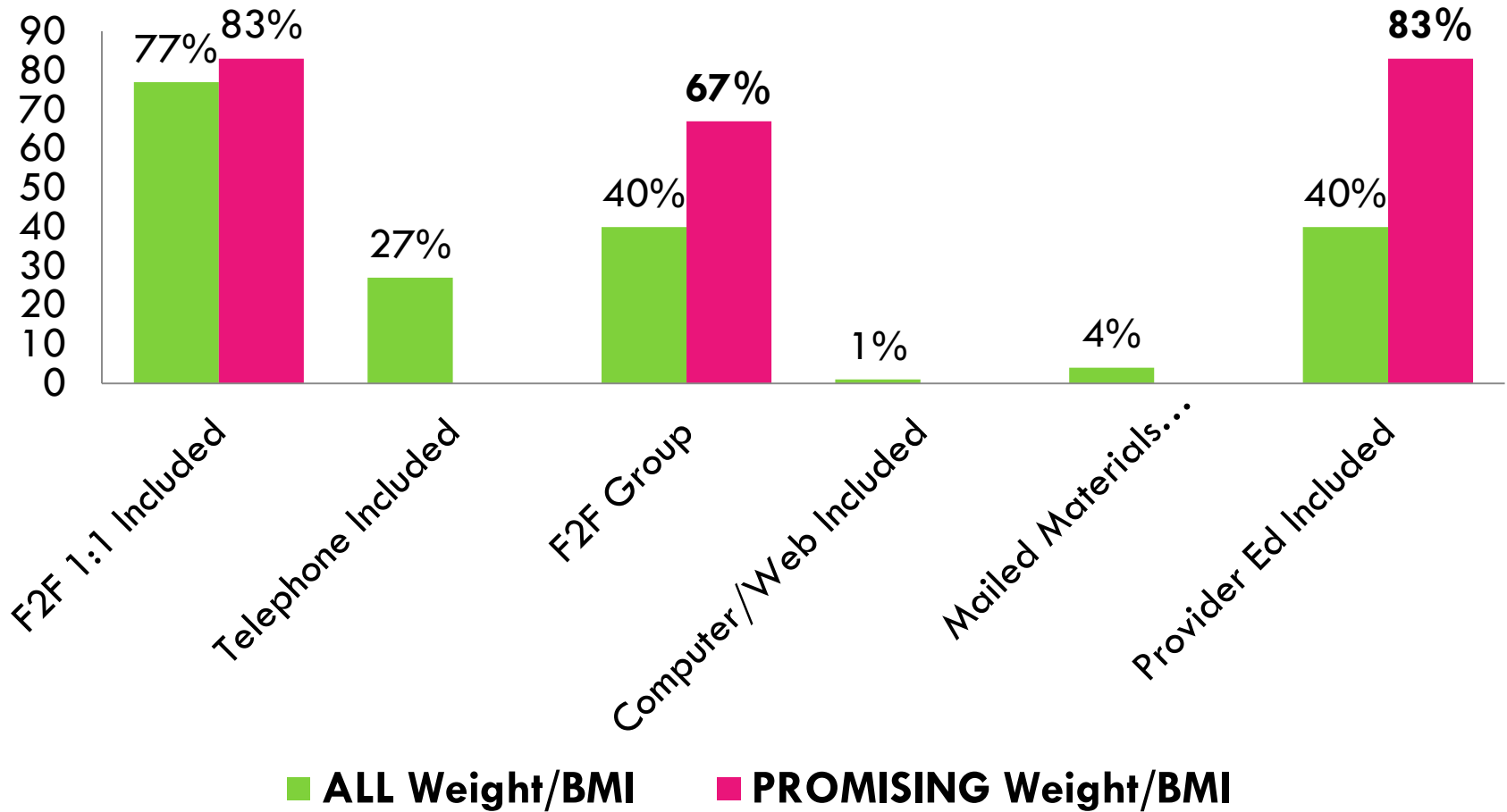
Weight/BMI & A1c Studies

- Promising weight management strategies:
 - Studies which report **weight or BMI**
 - Studies which report **A1c**
- Clinically significant Δ
- Further evaluated based on QA
 - Representativeness of population, sample size, % completers, ITT, study design

“Promising” Δ in Weight/BMI

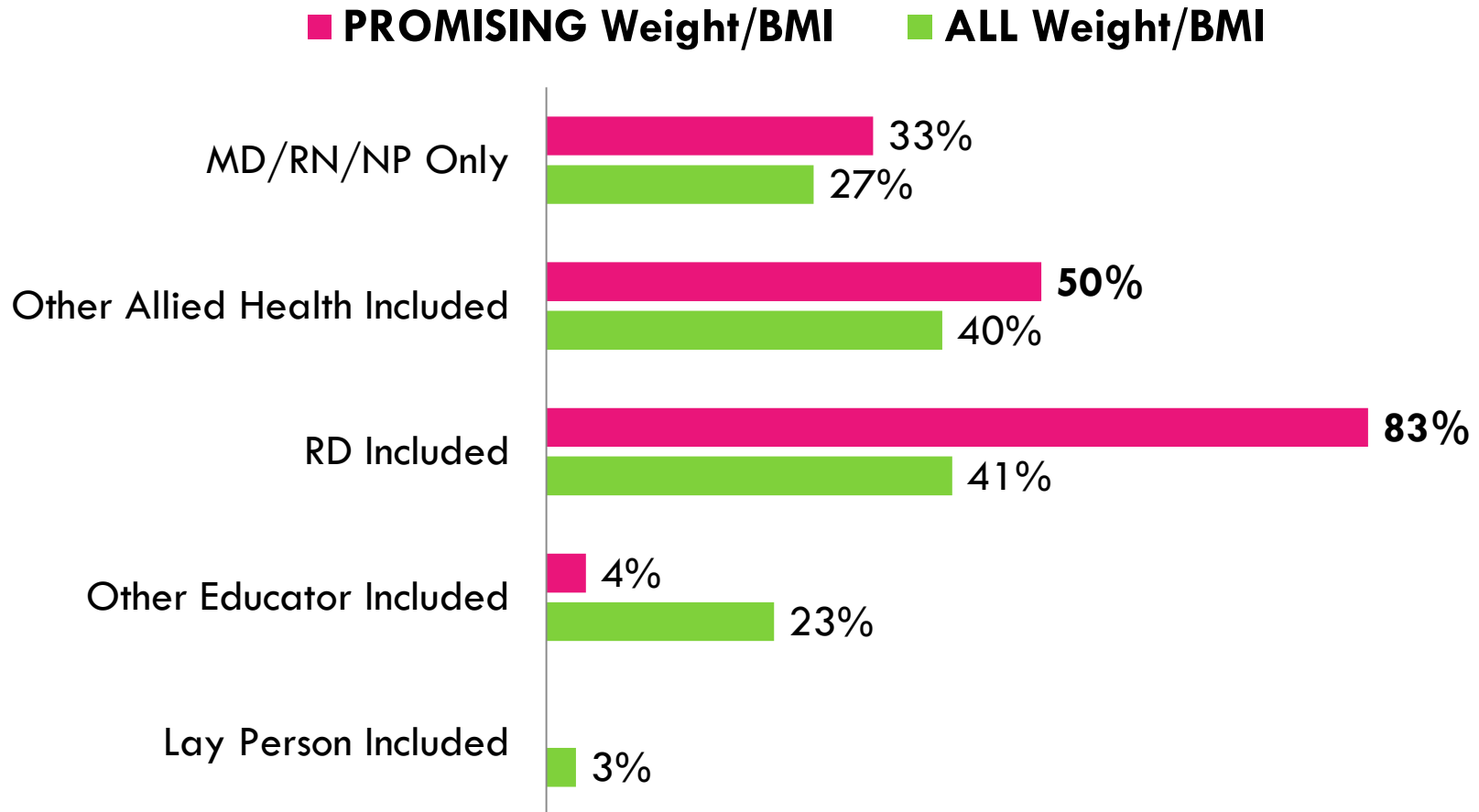
- 12/73 demonstrated **clinically relevant** results
- **“Clinically relevant”** defined as:
 - $\geq 3.0\%$ Weight Loss
 - OR
 - ≥ 1 BMI unit decrease
- After QA, only 6 studies **“promising”**

% Studies by Delivery Channel



***Note: more than one delivery method may be indicated for each study

% Studies by Provider

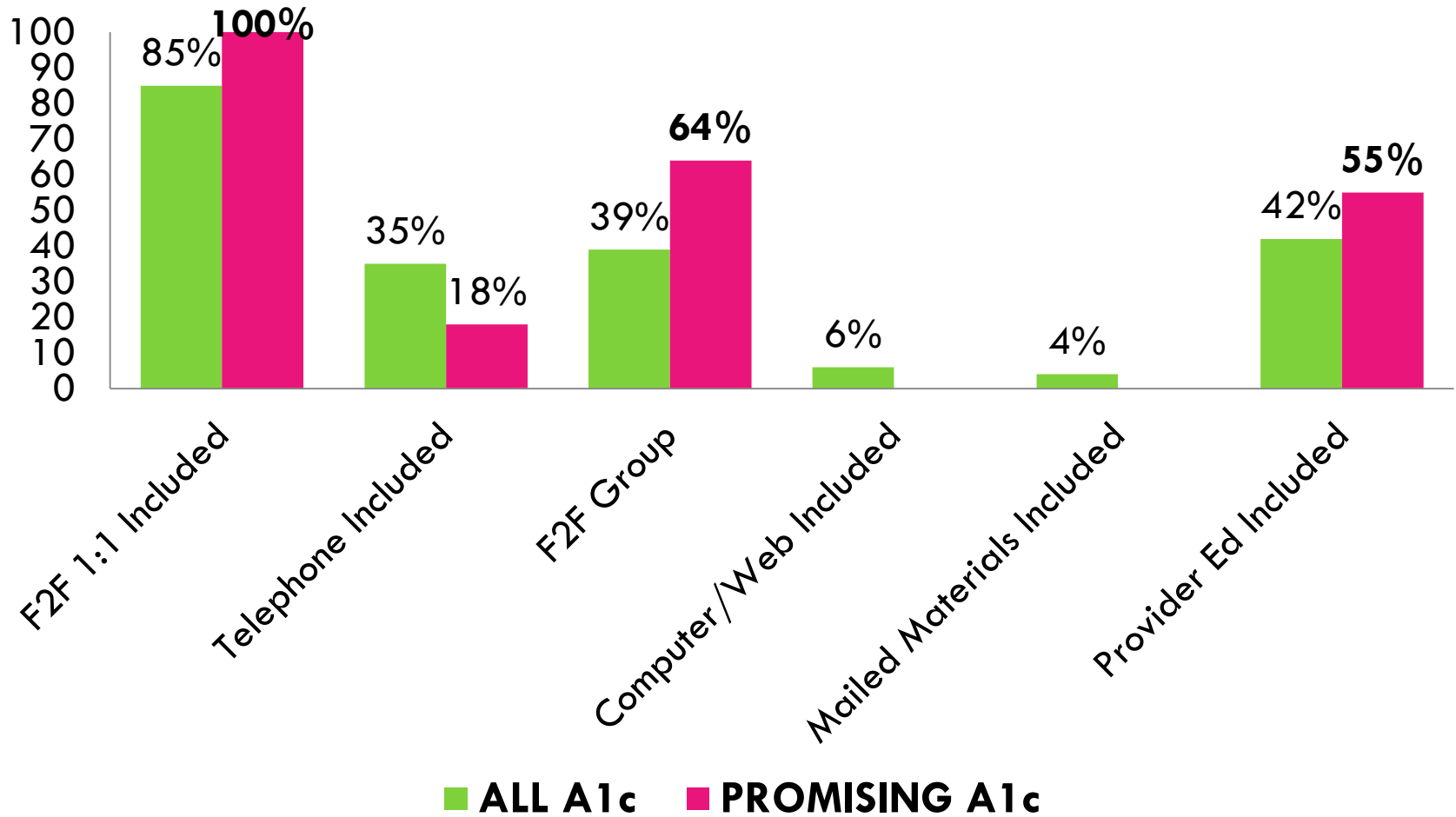


****Note: more than one type of provider may be indicated for each study*

“Promising” Δ in A1c

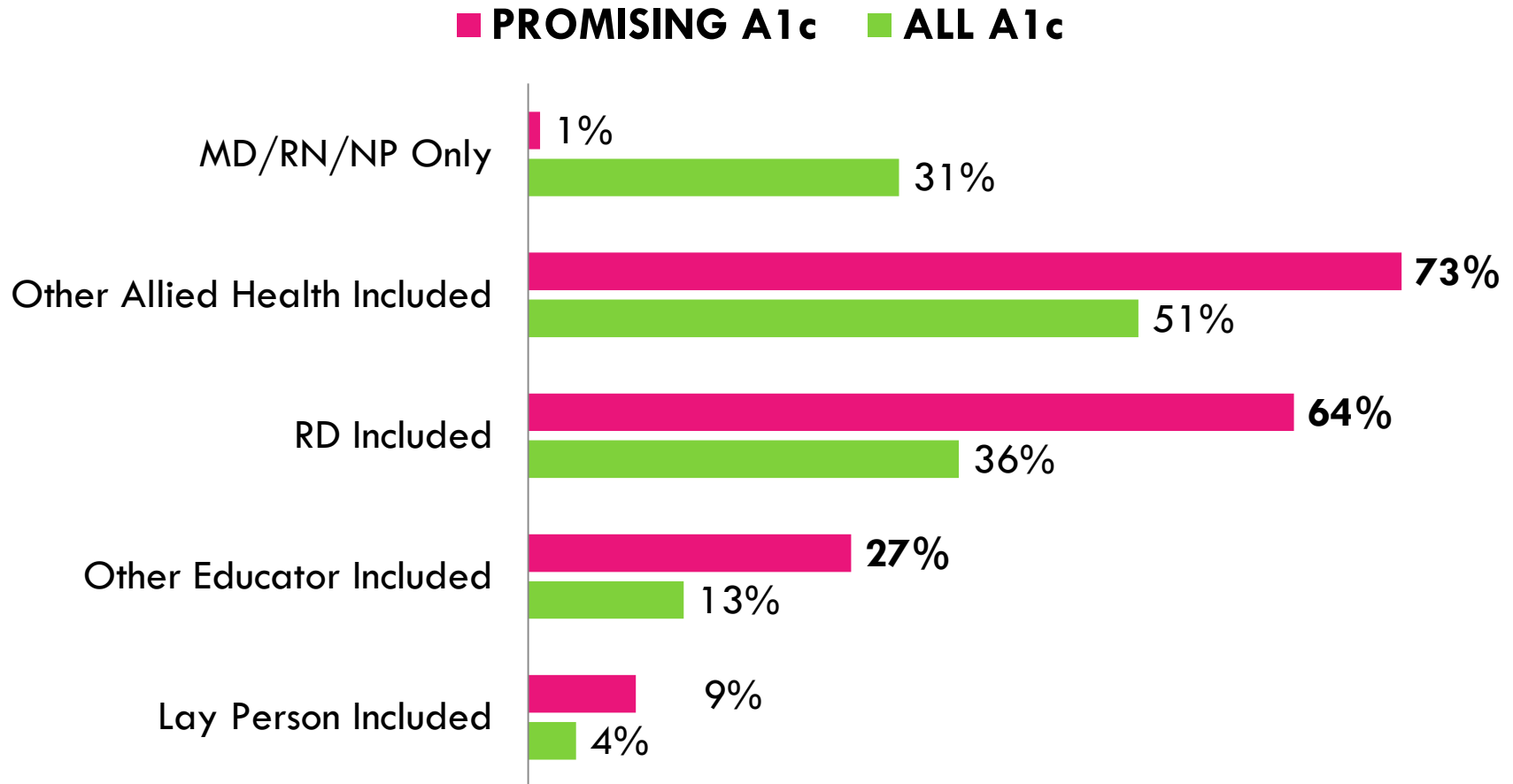
- 18/72 studies reported **clinically relevant** results
- **“Clinically relevant”** defined as:
 - $\geq 1.0\%$ decrease in A1c
- After QA, 11 are **“promising”**

% Studies by Delivery Channel



***Note: more than one delivery method may be indicated for each study

% Studies by Provider



***Note: more than one type of provider may be indicated for each study

Personal Skills & Self-mgt Support



- Beyond providing basic diet/PA counselling
- Shared decision-making and goal setting
- Learn to self-manage/be active in own care

Delivery System Design

- Case management (planned interactions and f/u)
 - Bray et al. (2008)- APN facilitated diabetes education, patient flow, and management in the practice

- Focus on health promotion and disease prevention
 - Andrews & Holland (2003)- offered lifestyle program suitable for anyone to attend

- Population needs-based care
 - Tailored interventions to various target groups

Provider Decision Support

- Provider education beyond training on lifestyle education
- Evidence-based guidelines
- Measuring outcomes and giving feedback
- Supplying tools- e.g. treatment algorithms, access to specialist expertise

Conclusion

- Promising studies limited
 - 1:1 counselling, group counselling, involving RDs, and other allied health care professionals
 - Provider education
 - CCM model and addressed a change in the organization of care
- Overall, no clearly superior interventions emerged
- Provides direction for interventions combining elements

2. Focus groups - Methods

- Hamilton Family Health Team (FHT)
- Generate 'new ideas' for weight management in the FHT ensuring providers' and patients' perspectives included
- Professional moderator
- Clinical vignettes to focus discussion
 - Obese adult with multiple chronic conditions and barriers to weight loss (e.g. low income, time constraints, low motivation)
ALSO obese child
- ~ 1 hour long
- Audio-taped and transcribed
- Thematic post-hoc analysis (NVivo)

Focus group - Participants

- n = 6 to 13 participants / group
- Provider focus groups (n=7 groups)
 - 5 specialty groups (dietitians, mental health workers, pharmacists, physicians)
 - 2 mixed provider groups (nurses, NPs, administrators, other providers)
- Patient focus groups (n=4 groups)
 - 'Healthy You' program (2 groups)
 - Diabetes program
 - Early Years Centre



Focus group - Results

- Program activities incorporated into themes directed at patients and the organization
- Clinical Care Themes
 - Raising awareness among patients / developing intention
 - Screening for obesity / health risk
 - Clinical care (assessment and diagnosis)
 - Skill building / education / counselling
 - Ongoing support
 - Social and peer support

Focus group - Results

- Organizational Effort Themes
 - Coordination / collaboration / partnerships
 - Creating awareness among health professionals
 - Adding new expertise to the team
 - Marketing
 - Lobbying / Advocacy

3. Consensus workshop

- 11 members Guelph Family Health Team
- Review themes and program ideas from focus groups to develop draft planning framework
- All-day workshop
- Electronic meeting system
 - Queen's executive decision centre
- Professional moderator



Consensus workshop - Process

- a. Identify target groups – population-based planning
- b. Identify desired health outcomes for target group

Age groups	Pregnancy	3-12 years	13-18 years	18+ years health risk or chronic disease	18+ years medically complex
Desired Outcomes	appropriate weight gain; manage gestation diabetes	healthy growth; develop & foster good habits	healthy body image; healthy attitudes re: drugs etc.	moderate weight loss; manage chronic disease	Quality of life; self-management skills

Consensus workshop - Process

- c. Brainstorm strategies and interventions for target groups of interest – discuss and collapse ideas

Age groups	Pregnancy	3-12 years	13-18 years	18+ years health risk	18+ years medically complex
Raising awareness					
Screening for obesity					
Clinical care					
Skill building					
Ongoing support					
Social / peer support					

Age groups	Pregnancy	3-12 years	13-18 years	18+ years health risk	18+ years medically complex
Raising awareness	<i>pamphlet</i>	educational info targeting parents	<i>media campaign</i>	<i>waiting room activities</i>	<i>increase awareness re: FHT programs</i>
Screening for obesity	<i>BMI</i>	<i>screen early for BMI</i>	<i>BMI, blood pressure</i>	<i>BMI, waist circumference</i>	<i>depression, mood disorder screen</i>
Clinical care	<i>verbal advice</i>	regular visits to PCP	<i>regular visits to PCP</i>	SMART goal setting	<i>SMART goal setting</i>
Skill building		<i>family counselling</i>		<i>Weight loss grp DEC class</i>	Self-mgt class
Ongoing support		<i>internal referral</i>	<i>online support</i>	<i>telephone follow-up</i>	<i>group visits</i> Link to specialty programs
Social / peer support		<i>buddy system</i>	<i>develop peer leaders</i>	peer-led support	<i>social services</i>

Consensus workshop - Summary

- Need to consider mental health and SES issues in all groups
- Satisfaction evaluation. Participants were:
 - 'very satisfied' with the workshop
 - 'strongly agree' that participation was an effective use of time
 - 'moderately agree' that the planning framework can improve PC weight management services

Next phases



- CIHR Funding confirmed
 - Four more consensus sessions - 12 FHTs
 - National review by expert panel – CON to help
- Team grant proposal – PHCS and UofG funding to develop