

Digital Dilemmas

HOW TO HELP PATIENTS CHOOSE THE RIGHT GI BEHAVIORAL HEALTH DIGITAL THERAPEUTIC

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LEARNING OBJECTIVES

- Identify the spectrum of digital tools available to augment patient care
- Discuss the pros and cons of different GI-specific behavioral health therapeutics
- Determine how to identify the right therapeutic for the right patient

Case:

31 year-old woman

CC: Generalized abdominal pain

HPI:

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- Pain can peak at various points throughout the day without predictability
- Bowel problems since childhood, worsening of symptoms since her first pregnancy/delivery
- Certain foods seem to make her pain worse but she has been too busy to keep track
- Accompanied by bloating, distension, relieved with bowel movement
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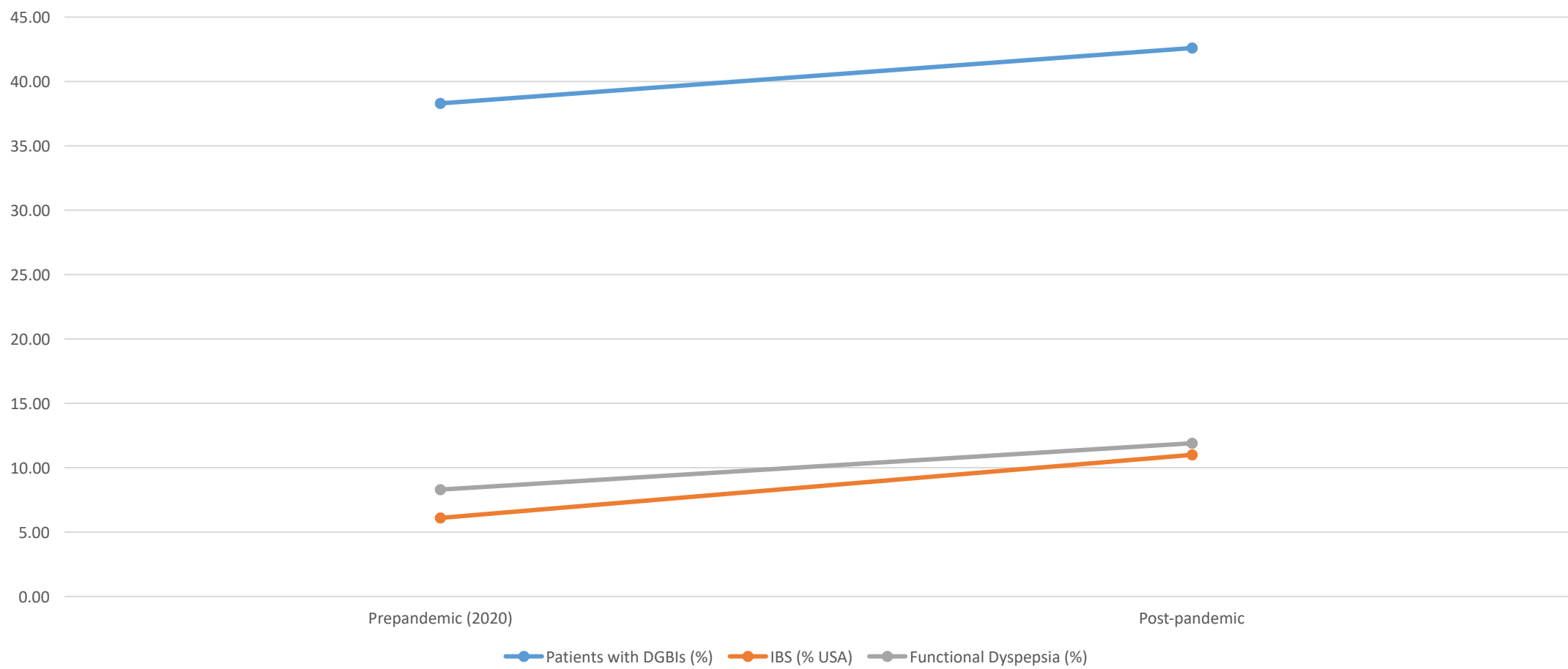
PHx: Seronegative arthritis, fatigue, chronic shoulder and back pain, migraines

She has sought care with multiple providers and is frustrated at her lack of diagnosis. She is open to nonpharmaceutical therapies.

What digital tools can you offer to augment the patient's care?

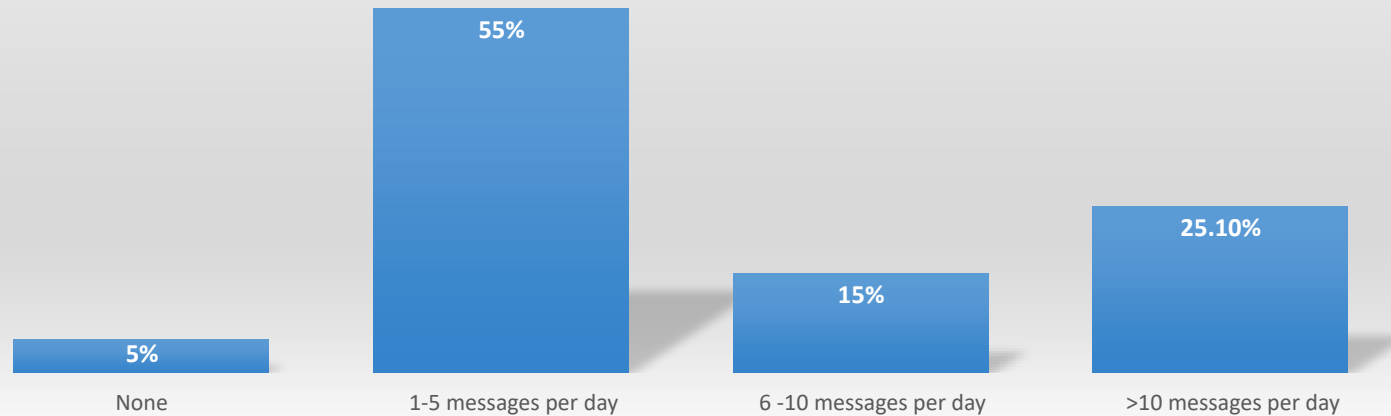
First, some context

Rates of DGBIs have increased Post-COVID



Sperber AD, Gastroenterology. 2021;160(1):99-114.e3.
Palsson OS, Neurogastroenterology and Motility. 2023;35(6):e14564.

Average daily number of portal messages received per GI physician per day



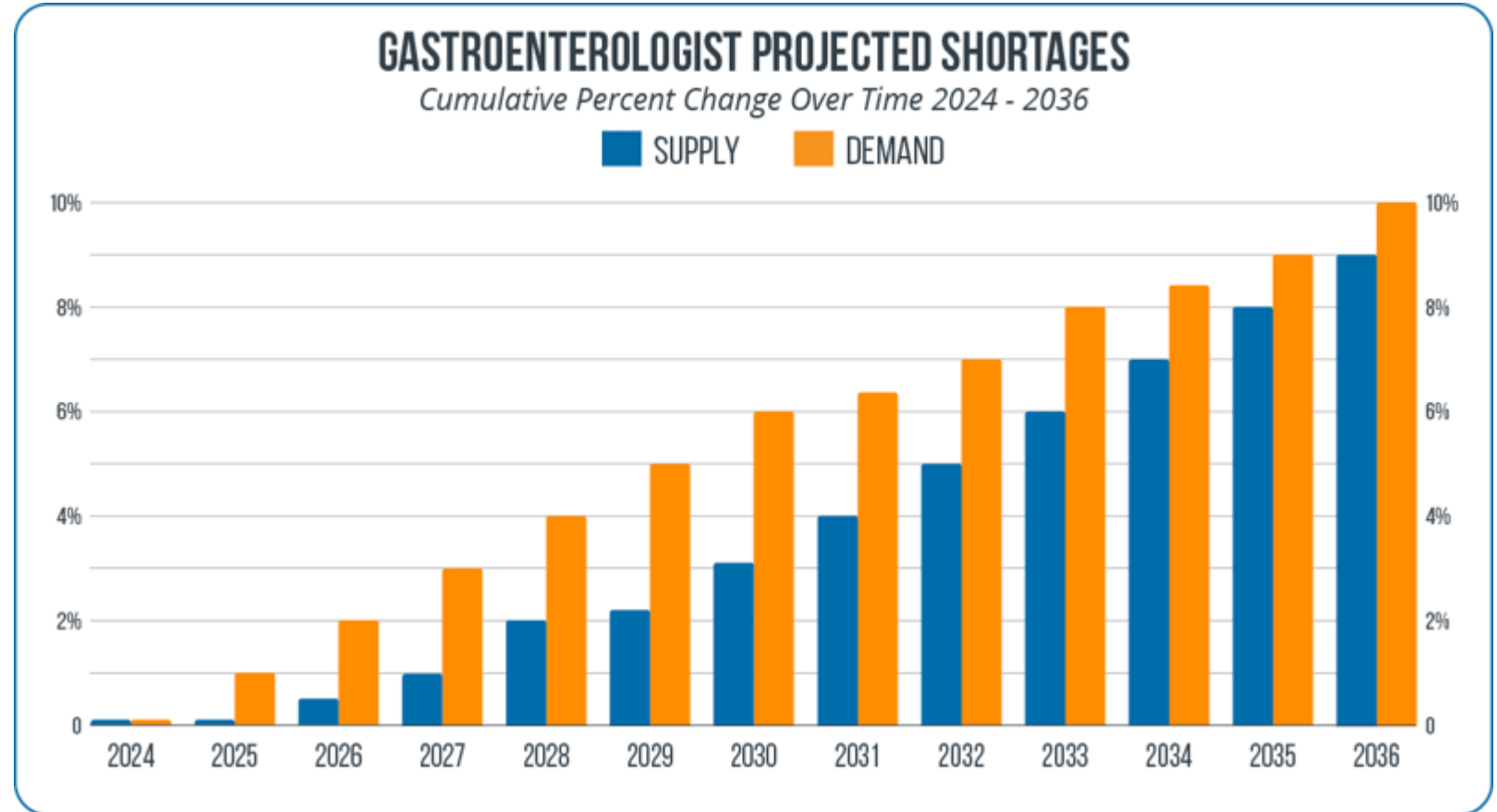
N=20 GI physicians

- 60% Perceived portal messages increases workload
- 85% Manages portal after-hours
- 45% perceive that portal messaging negatively impacts overall wellness

In 2024,

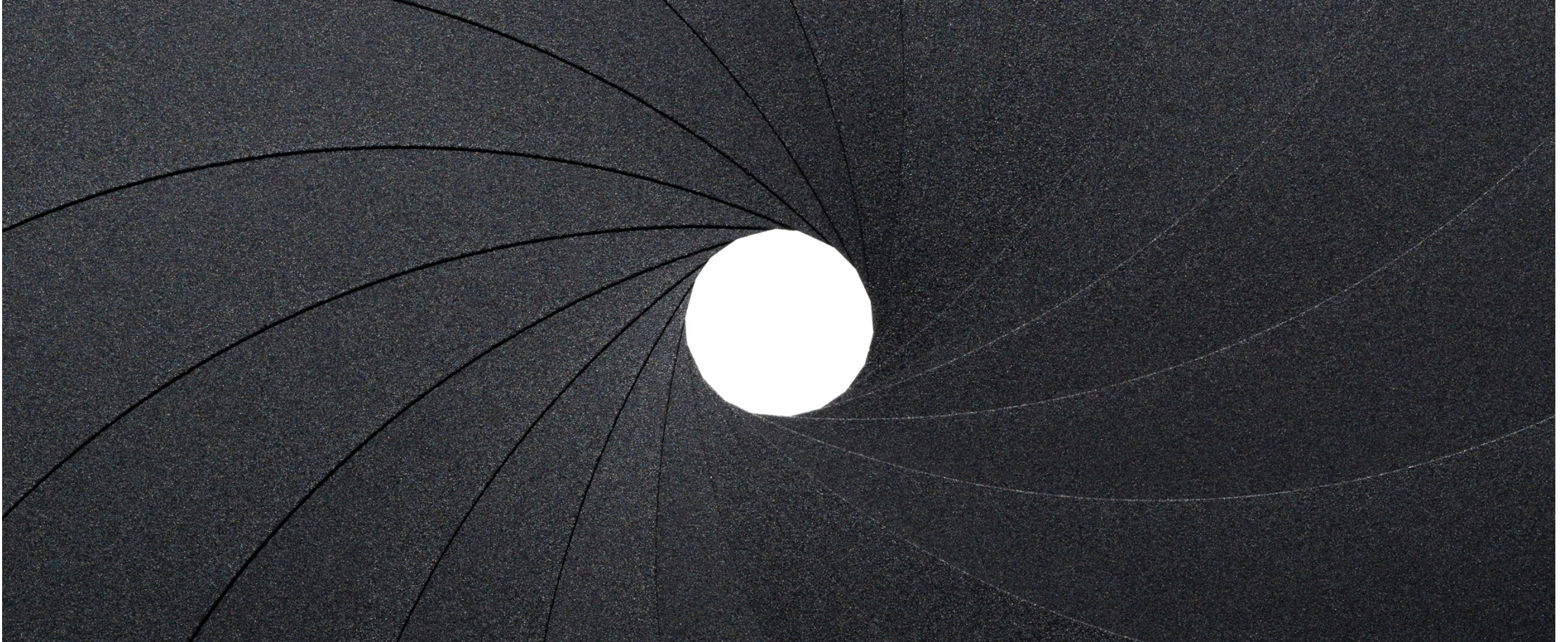
- 18,756 active gastroenterologists in US
 - >50% nearing retirement age in the next decade
 - 688 new GI fellows matched (35% not matched!)
- Aging population: Increased demand for GI care (screening, etc)

US Health Services Administration projects **by 2025, GI will face a shortage of 1,630 FTEs**



<https://medicushcs.com/resources/addressing-the-impending-gastroenterologist-shortage>

Let's focus



Brain gut behavior therapies (BGBTs) work for DGBIs

Cognitive behavior therapy, gut-directed
hypnotherapy, and more

Behavioral/Psychologic therapies work

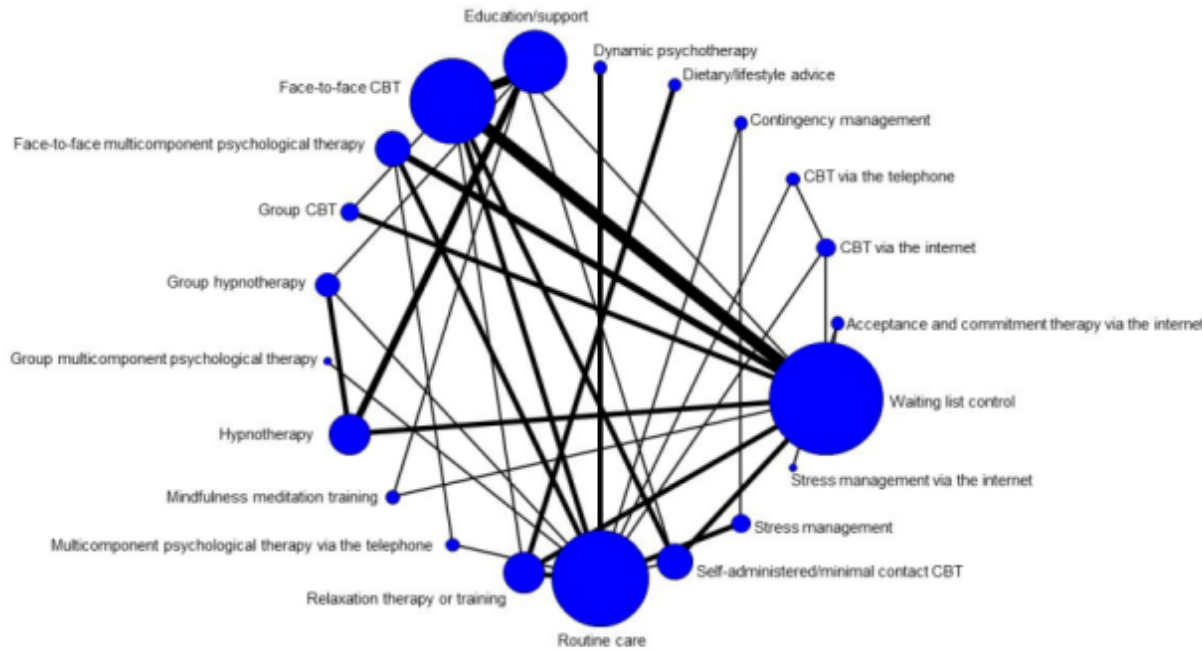


Figure 1 Network plot for failure to achieve an improvement in IBS symptoms at first point of follow-up post-treatment. Circle (node) size is proportional to the number of study participants assigned to receive each intervention. The line width (connection size) corresponds to the number of studies comparing the individual treatments. CBT, cognitive-behavioural therapy; IBS, irritable bowel syndrome.

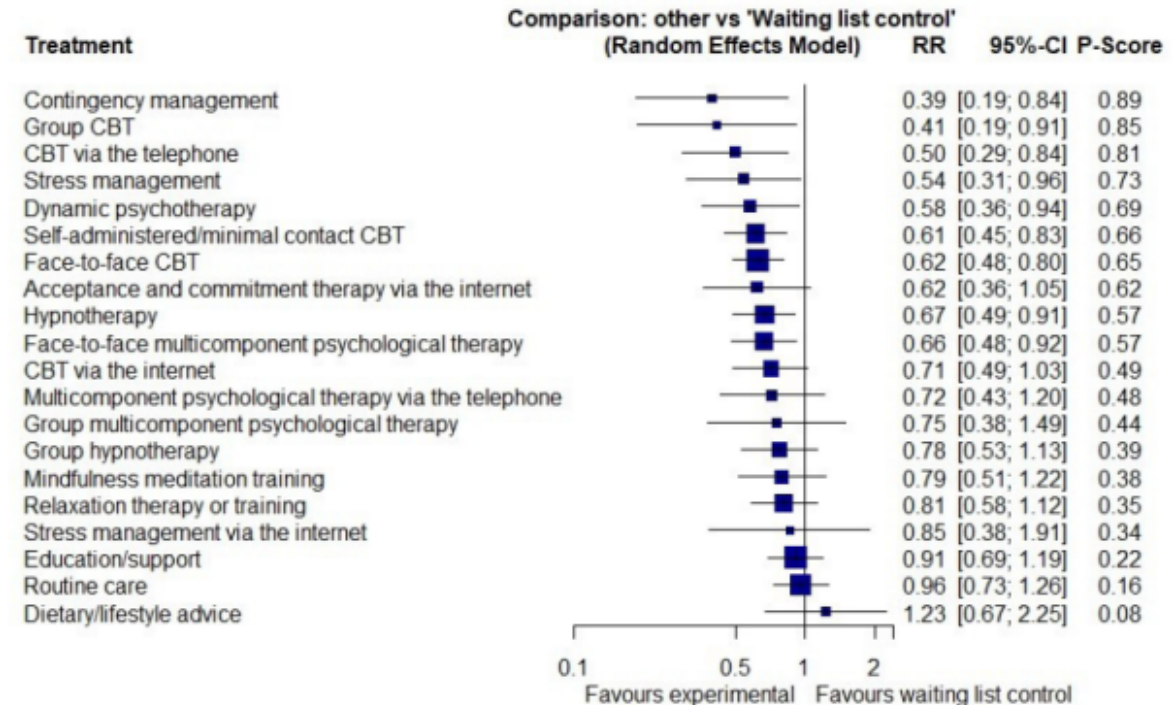


Figure 2 Forest plot for failure to achieve an improvement in IBS symptoms at first point of follow-up post-treatment. The P score is the probability of each treatment being ranked as best in the network analysis. A higher score equates to a greater probability of being ranked first. CBT, cognitive-behavioural therapy; IBS, irritable bowel syndrome; RR, relative risk.

1. Cognitive behavioral therapy (F2F and no-minimal contact)
2. Gut-directed hypnotherapy

Access is limited

DGBI patients

- IBS:
 - 6.1%
 - 15-20 million adults
- FD:
 - 10-12%
 - 25 to 30 million adults

Psychogastroenterology Providers*

- 320 total
 - 53 PsyD
 - 153 PhD
 - 32 MD/DO

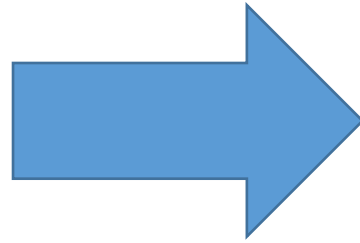
*Rome Psychogastroenterology Listserv

Can technology help (save) us?



WHAT ARE DIGITAL THERAPEUTICS?

What are digital therapeutics?



Evidence based intervention that delivers therapeutic outcomes using software programs

Key components of a “digital therapeutic”

- **Evidence-based:**
 - Backed by clinical trials demonstrating efficacy
- **Regulated:**
 - Mayo undergo regulatory review (FDA or EMA)
 - May be prescribed by healthcare providers and sometimes covered by insurance
- **Targeted treatment:**
 - Designed to address a specific disease or disorder
- **Delivered digitally:**
 - Mobile apps, web platforms, or other connected devices
- **Often personalized:**
 - Adaptive algorithms can tailor treatment to individual patient needs.

Examples

- Digital CBT
 - Mahana Therapeutics (FDA Cleared)
- Digital Gut-Directed Hypnotherapy
 - Regulora (metaMe Health; FDA cleared)
 - Nerva (Mindset Health)
 - Nonprescription, no FDA bid

Let's zoom out

The Digital Health Ecosystem



Digital Health Ecosystem



Digital Health Apps (Wellness Tools)

Meditation, fitness, nutrition, trackers

Digital Health Ecosystem



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Meditation, fitness, nutrition, trackers



Evidence, regulation,
disease focus



Digital Therapeutics (DTx) (Software as Medicine)

Clinically validated, regulated, condition-specific

Digital Health Ecosystem



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+ Human clinicians



Digital Health Companies / Hybrid Care Platforms

Apps + Telehealth + Care Teams
Virtual-first clinics, chronic care

DIGITAL HEALTH APPS



Key components of a “digital health app”

- **Wellness-focused:**
 - Encourage healthy lifestyles (e.g., exercise, sleep hygiene, nutrition)
- **Broad use:**
 - Can be used by anyone, not just patients or for specific conditions
- **Unregulated (mostly):**
 - Many don't need FDA or EMA clearance (not treating a medical condition)
- **Supportive role:**
 - Provide information, tracking, or coaching
 - Usually aren't standalone treatments

Examples

- MyFitnessPal
 - Diet, exercise, weight tracker
- Noom
 - Diet, weight, movement tracker
 - Psychoeducation
- Calm
 - General mental health education
 - Focused meditations, sleep stories, breathing exercises
- Stool trackers
 - Dieta (studied for management of lactulose in hepatic encephalopathy)
 - Poop Tracker (uses BSFS)
 - Happy Poop (uses BSFS)
 - Poop Map (keeps track of WHERE)
 - Plop (BM + food and supplement intake)
 - PoopLog (photos, locations, notes, consistency, abnormal changes)
 - Poopify: (BSFS, can track menstrual cycle for women, tracks multiple users)



7 Best Poop Tracker Apps in 2025

Digital Health App “Plus”

- **Disease focused**
- **Wellness + Disease related symptom trackers**
 - Can be used by anyone, not just patients or for specific conditions
- **Component of personalized feedback**
 - Dietary guidance based on symptoms

Examples

- MyGiHealth
 - Symptom tracker
 - Education tailored to symptoms
 - Uses validated GI questionnaires
 - Developed w support of AGA, Cedars-Sinai, U Michigan, UCLA
- Monash FODMAP app
 - Detailed guide to low and high FODMAP foods
 - Low FODMAP recipes

Digital Health Ecosystem



Digital Health Apps (Wellness Tools)

Meditation, fitness, nutrition, trackers



Evidence, regulation,
disease focus



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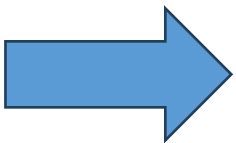


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Digital Health Companies / Hybrid Care Platforms

Apps + Telehealth + Care Teams
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DIGITAL HEALTH COMPANIES/ DIGITAL CARE PLATFORMS



Companies that use technology to improve healthcare delivery or patient experience

- **Hybrid Care/Virtual-First Care Companies**
 - Digital tools (tracking, assessment, education)
 - +
 - Human care (telehealth visits, heat coaches, therapists, dieticians, etc)
 - “Virtual first care”: primary touchpoint is digital
- **Digital Care Platforms/Integrated Digital Health Platforms:**
 - Patient-facing app
 - Remote monitoring
 - Telehealth consultations
 - Care team dashboards

Subcategories

- Digital therapeutic + telehealth
- Chronic condition management companies
- Virtual specialty clinics

Examples

- **Cara Care**
 - Track symptoms, food, stress, bowel movements, and symptoms
 - 12-week low FODMAP program
 - Chat w/ dieticians for personalized diet guidance
- **Abyle Health** (IBD & IBS patients)
 - Personalized nutrition plan
 - Mind-gut program (CBT, GDH, ACT, breathing, mindfulness), curated articles, videos, resources
 - GI Care team access
- **Lin Health** (Chronic pain/central sensitization)
 - Physician intake/assessment; telehealth with pain coaches to develop a pain recovery plan
 - Pain coach access 24/7
 - Education modules on central sensitization
- **Oshi Health**
 - Initially IBD self-management app, now a virtual-first GI care platform
 - Holistic GI management: diet, psychological, medical

Options available for IBD, Cirrhosis

- **myIBD Care (Ampersand Health)**
 - Medication reminders, symptom tracking, mood and fatigue monitoring
- **Trellus Health (IBD patients)**
 - Focuses on resilience building model: Disease acceptance, Social Support, Self-regulation, Self-confidence, Learned optimism
 - Serves health plans, employers, benefit consultants, providers/health systems, pharma and CROs.
- **CirrhoCare**
 - Remote monitoring solution for **cirrhosis patients**
 - Tracks weight, nutrition, encephalopathy symptoms, and ascites-related events
- **Ria Treatment Platform (RTP)**
 - Digital alcohol use disorder treatment program
 - Online coaching, digital tools to track progress, medications for sobriety
 - Bluetooth-linked breathalyzer
- **Medisafe**
 - help patients stay adherent with complex regimens (immunosuppressants, antivirals).

	Digital Health Apps	Digital Therapeutics (DTx)	Digital Health Companies / Hybrid Care Platforms
Purpose	Promote general wellness, lifestyle, or patient engagement	Treat, manage, or prevent a diagnosed medical condition	Deliver integrated care using digital tools + telehealth services
Evidence Base	May have user/consumer evidence but rarely clinical trials	Backed by rigorous clinical trials and published studies	Variable: some validate outcomes, others emphasize patient engagement/real-world data
Regulation	Generally unregulated unless making medical claims	Typically regulated as medical devices (e.g., FDA, EMA)	Some regulated (if offering DTx), but many operate as healthcare providers rather than device/software firms
Prescription	Direct-to-consumer	Often requires clinician prescription (sometimes reimbursed by payers)	Patients may enter directly (D2C) or via employer/insurer contracts; clinicians often integrated
Delivery	Mobile app, wearable, or online platform	Software-based therapeutic program (app, desktop, VR, etc.)	Hybrid : app/portal + telehealth visits + remote monitoring + care teams
Personalization	Lifestyle-oriented customization (e.g., workout plans)	Algorithm-driven personalization to patient condition	Care plans tailored by both tech (data-driven) and human clinicians
Examples	Calm, MyFitnessPal, Dieta,	Nerva, (Regulora)	Cara Care, Lin Health (pain), Ayble Health (chronic care), Oshi health

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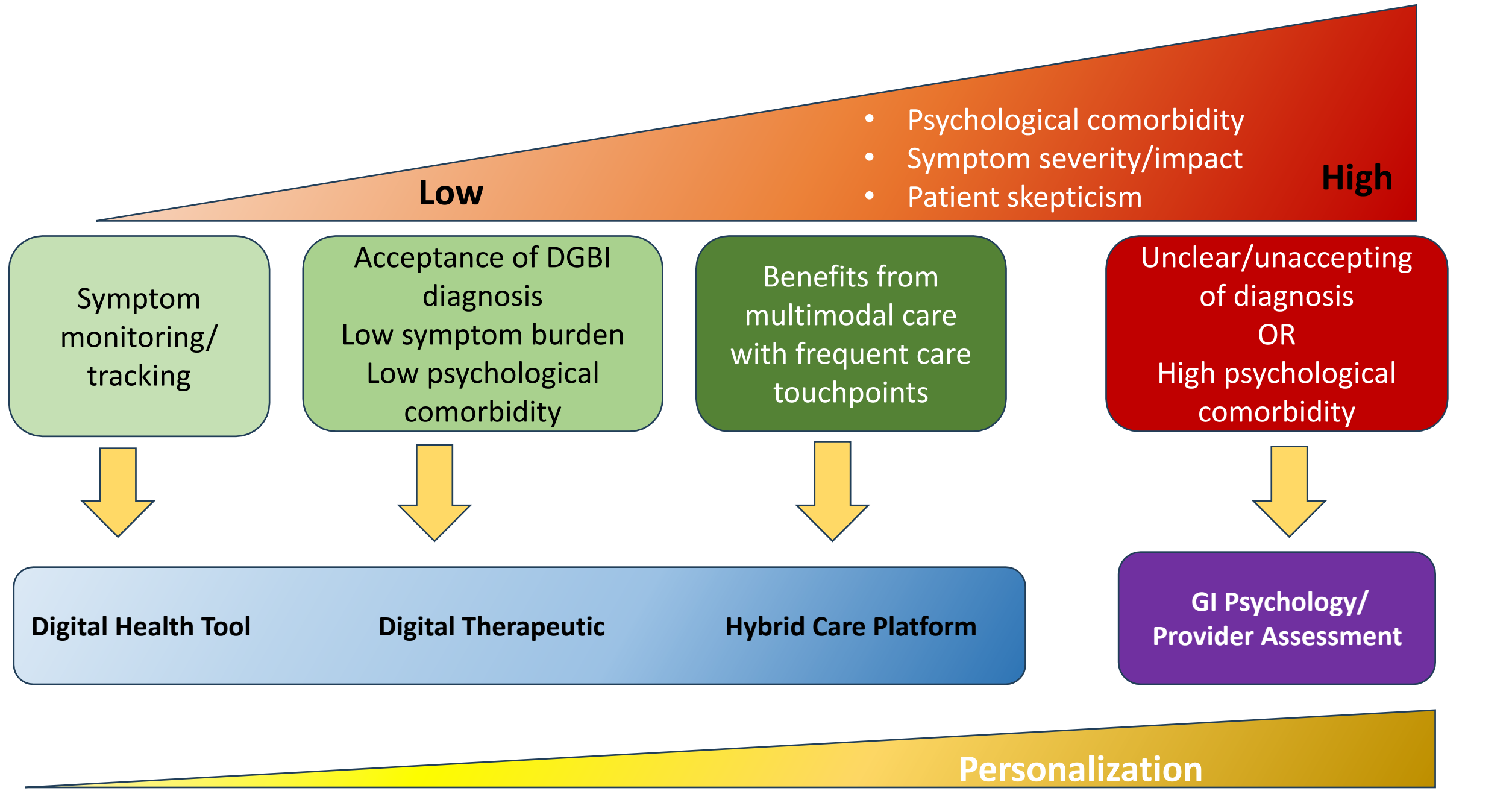
What digital tools can you offer to augment the patient's care?

How do you choose?

Patient preference

Patient needs

Patient comorbidities



Limitations and caveats

- Buy in is key
- Insurance access and approval remains a barrier
 - Hybrid care systems are receiving more insurance approvals
- Failure of a digital therapeutic \neq failure of brain gut behavior therapy!

In Conclusion

- Brain gut behavioral therapies are effective, but access to BGBT & healthcare overall is limited
- The Digital Health Ecosystem can help bridge gaps
 - Digital Health Apps (+)
 - Digital Therapeutics
 - Digital Health Companies/Hybrid Care Models
- Digital health solutions are not for every patient—choose based on individual patient needs
 - Evaluation degree of personalization needed and accessibility
 - The best therapy is worthless if the patient won't use it

QUESTIONS & ANSWERS

