Coverage for Digital Tools for Mental Health

This research was commissioned by the Mental Health Treatment and Research Institute LLC, a not-for-profit subsidiary of The Bowman Family Foundation.
Adam C. Powell, Ph.D.

**Active Roles**

- President, Payer+Provider Syndicate, 2012 – Present
- Director of Outcomes Research, HealthHelp, 2014 – Present
- Lecturer in Health Informatics, Northeastern University, 2012 – Present
- Lecturer in Healthcare Finance, Thomas Jefferson University, 2016 – Present
- Visiting Faculty in Health IT Management, Indian School of Business, 2013 – Present

**Education**

- Ph.D., The Wharton School, Health Care Management & Economics
- M.A., The Wharton School, Health Care Management & Economics
- S.B., MIT Sloan School of Management, Management Science
- S.B., MIT, Writing
Disclosures

• Employment by Payer+Provider Syndicate
• Stock ownership of Berkshire Hathaway, Community Health Systems, CVS Health Corp, HCA Healthcare, Payer+Provider Syndicate, Quorum Health Corp, and Tenet Healthcare Corp
• Paid positions on the Scientific Advisory Board of PsyberGuide and on the Expert’s Council of the Mary Christie Foundation
• This presentation is based upon research was commissioned by the Mental Health Treatment and Research Institute LLC, a not-for-profit subsidiary of The Bowman Family Foundation.
• All opinions expressed during this presentation are those of Adam Powell, and should not be considered to represent the opinion of any organization or other individual
Agenda

• Introduction to the topic of app reimbursement
• How apps are reimbursed today
• Codes that can potentially be used for reimbursement
• Limitations of existing reimbursement pathways
• Questions
Mental Health is Ripe for Apps

- There are many validated instruments in mental health that rely upon self-reported data
- Smartphones are great at capturing self-reported data
- Apps can take well-validated traditional tools and enable people to use them more conveniently and more frequently
Why Financial Coverage Matters

Better financial coverage

More app development

More utilization by patients & providers
Who pays for apps today?

• It depends on the app and how it is used

• Payments are made by:
  • Patients
  • Healthcare providers
  • Employers
  • Insurers

• The nature of the item garnering payment also varies
  • Some payments are for the apps themselves
  • Some payments are for services that are delivered with the assistance of apps
The Uber Example

- Uber has an app
- People pay Uber money
- Payments are for app-facilitated transportation services
- Payments are not for the app itself
Actual and Potential Channels for App Reimbursement

Who pays?

Patient

Direct Payment

Patient-Based Payment

- One-time fee
- Subscription
- Utilization-based (in-app purchases)

From: Powell AC, Bowman MB, Harbin HT. Reimbursement of Apps for Mental Health: Current Practices and Potential Pathways. 2019. This research was commissioned by the Mental Health Treatment and Research Institute LLC, a not-for-profit subsidiary of The Bowman Family Foundation. Figure not to be reproduced.
Actual and Potential Channels for App Reimbursement

Who pays?

Healthcare Provider

Patient

Provider-Based Payment

- One-time fee for a site license
- Subscription for a site license
- One-time fee per user
- Per user per month fee
- Utilization-based fee

From: Powell AC, Bowman MB, Harbin HT. Reimbursement of Apps for Mental Health: Current Practices and Potential Pathways. 2019. This research was commissioned by the Mental Health Treatment and Research Institute LLC, a not-for-profit subsidiary of The Bowman Family Foundation. Figure not to be reproduced.
Actual and Potential Channels for App Reimbursement

Who pays?

- Employer
- Healthcare Provider
- Patient

**Employer-Based Payment**

- One-time fee for a site license
- Subscription for a site license
- One-time fee per user
- Per employee per month fee
- Utilization-based fee

From: Powell AC, Bowman MB, Harbin HT. Reimbursement of Apps for Mental Health: Current Practices and Potential Pathways. 2019. This research was commissioned by the Mental Health Treatment and Research Institute LLC, a not-for-profit subsidiary of The Bowman Family Foundation. Figure not to be reproduced.
Actual and Potential Channels for App Reimbursement

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Spectrum of Healthcare Provider and Technician Involvement in App Use

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Figure not to be reproduced.
Why does level of provider involvement matter?

• Current Procedural Terminology (CPT) codes are reimbursed by payers in accordance with their designated Relative Value Units (RVUs)

• There are three components used to determine the total RVUs:
  • Work RVUs
  • Malpractice RVUs
  • Practice expense RVUs

• Physician time -> work RVUs assigned
• Staff time -> practice expense RVUs assigned

• Many CPT codes have requirements that there be particular levels of physician and/or staff involvement in the delivery of a service, measured in minutes
Codes that Could Potentially be Used for Reimbursement

- Often require physician or staff time
- Cover self-directed screening via 96127
  - “Brief emotional/behavioral assessment with scoring and documentation, per standardized instrument”
- Cover various forms of screening and assessment with automated interpretation
- Cover treatment interventions that may be augmented by technology, but are billed on the basis of physician or staff involvement
## CPT Codes Appropriate for Assorted Instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>96110</th>
<th>96127</th>
<th>96160</th>
<th>96161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Concussion Evaluation (ACE)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Ages and Stages Questionnaire – Third Edition</td>
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<tr>
<td>Ages and Stages Questionnaire – Social Emotional</td>
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<tr>
<td>Australian Scale for Asperger Syndrome (ASAS)</td>
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<tr>
<td>Beck Youth Inventory – Second Edition BYI-II</td>
<td>X</td>
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<tr>
<td>Behavior Assessment Scale for Children – 2nd Edition</td>
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<td>X</td>
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<tr>
<td>Behavior Rating Inventory of Executive Function</td>
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<td>X</td>
<td></td>
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<tr>
<td>Conners Rating Scale</td>
<td></td>
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<td>X</td>
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<tr>
<td>CRAFFT Screening Interview</td>
<td></td>
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<td>X</td>
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<tr>
<td>Edinburgh Postnatal Depression Scale* (EPDS)</td>
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<td></td>
<td>X</td>
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<tr>
<td>Edinburgh Postnatal Depression Scale (EPDS)</td>
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<tr>
<td>Kutcher Adolescent Depression Scale (KADS)</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Modified Checklist for Autism in Toddlers (MCHAT)</td>
<td>X</td>
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<tr>
<td>Patient Health Questionnaire (PHQ-2 or PHQ-9)</td>
<td></td>
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<td></td>
<td>X</td>
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<tr>
<td>Parents’ Evaluation of Developmental Status (PEDS)</td>
<td>X</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pediatric Symptom Checklist (PSC)</td>
<td></td>
<td></td>
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<td>X</td>
</tr>
<tr>
<td>Screen for Child Anxiety Related Disorders (SCARED)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Vanderbilt rating scales</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

- **96127** is the most common code used for emotional and behavioral assessments
- **96110** is used for developmental screening
- **96160** is used to assess for mental health issues present in a patient
- **96161** is used to assess for mental health issues present in a caregiver

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Pre-existing psychotherapy codes can be used to bill for telepsychiatry or app-augmented live psychiatry

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>90832</td>
<td>Psychotherapy, <strong>30 minutes</strong> with patient (Using 95 or GT modifier to indicate telemental health)</td>
</tr>
<tr>
<td>90885</td>
<td>Psychiatric evaluation of hospital records, other psychiatric reports, psychometric and/or projective tests, and other accumulated data for medical diagnostic purposes</td>
</tr>
<tr>
<td>90887</td>
<td>Interpretation or explanation of results of psychiatric, other medical examinations and procedures, or other accumulated data to family or other responsible persons, or advising them how to assist patient</td>
</tr>
<tr>
<td>90889</td>
<td>Preparation of report of patient's psychiatric status, history, treatment, or progress (other than for legal or consultative purposes) for other individuals, agencies, or insurance carriers</td>
</tr>
</tbody>
</table>
Pre-existing assessment codes can be used to bill for app-augmented assessments

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>96105</td>
<td>Assessment of aphasia (includes assessment of expressive and receptive speech and language function, language comprehension, speech production ability, reading, spelling, writing, eg, by Boston Diagnostic Aphasia Examination) with interpretation and report, per hour</td>
</tr>
<tr>
<td>96110</td>
<td>Developmental screening (eg, developmental milestone survey, speech and language delay screen), with scoring and documentation, per standardized instrument</td>
</tr>
<tr>
<td>96116</td>
<td>Neurobehavioral status exam (clinical assessment of thinking, reasoning and judgment, [eg, acquired knowledge, attention, language, memory, planning and problem solving, and visual spatial abilities]), by physician or other qualified health care professional, both face-to-face time with the patient and time interpreting test results and preparing the report; first hour</td>
</tr>
<tr>
<td>96127</td>
<td>Brief emotional/behavioral assessment (eg, depression inventory, attention-deficit/hyperactivity disorder [ADHD] scale), with scoring and documentation, per standardized instrument</td>
</tr>
<tr>
<td>96130</td>
<td>Psychological testing evaluation services by physician or other qualified health care professional, including integration of patient data, interpretation of standardized test results and clinical data, clinical decision making, treatment planning and report, and interactive feedback to the patient, family member(s) or caregiver(s), when performed; first hour</td>
</tr>
<tr>
<td>96138</td>
<td>Psychological or neuropsychological test administration and scoring by technician, two or more tests, any method; first <strong>30 minutes</strong></td>
</tr>
<tr>
<td>96146</td>
<td>Psychological or neuropsychological test administration, with single automated, standardized instrument via electronic platform, with automated result only</td>
</tr>
<tr>
<td>96160</td>
<td>Administration of patient-focused health risk assessment instrument (eg, health hazard appraisal) with scoring and documentation, per standardized instrument</td>
</tr>
<tr>
<td>96161</td>
<td>Administration of caregiver-focused health risk assessment instrument (eg, depression inventory) for the benefit of the patient, with scoring and documentation, per standardized instrument</td>
</tr>
</tbody>
</table>
Pre-existing codes exist for remote monitoring of **physiological data**, medical team conferences, and substance cessation counseling can also be used by apps in some circumstances.

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>99091</td>
<td>Collection and interpretation of physiologic data (eg, ECG, blood pressure, glucose monitoring) digitally stored and/or transmitted by the patient and/or caregiver to the physician or other qualified health care professional, qualified by education, training, licensure/regulation (when applicable) requiring a minimum of <strong>30 minutes</strong> of time, each 30 days</td>
</tr>
<tr>
<td>99358</td>
<td>Prolonged evaluation and management service before and/or after direct patient care; <strong>first hour</strong></td>
</tr>
<tr>
<td>99367</td>
<td>Medical team conference with interdisciplinary team of health care professionals, patient and/or family not present, <strong>30 minutes</strong> or more; participation by physician</td>
</tr>
<tr>
<td>99401</td>
<td>Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately <strong>15 minutes</strong></td>
</tr>
<tr>
<td>99406</td>
<td>Smoking and tobacco use cessation counseling visit; intermediate, <strong>greater than 3 minutes up to 10 minutes</strong></td>
</tr>
<tr>
<td>99408</td>
<td>Alcohol and/or substance (other than tobacco) abuse structured screening (eg, AUDIT, DAST), and brief intervention (SBI) services; <strong>15 to 30 minutes</strong></td>
</tr>
<tr>
<td>99429</td>
<td>Unlisted preventive medicine service</td>
</tr>
<tr>
<td>99446</td>
<td>Interprofessional telephone/Internet/electronic health record assessment and management service provided by a consultative physician, including a verbal and written report to the patient’s treating/requesting physician or other qualified health care professional; <strong>5-10 minutes</strong> of medical consultative discussion and review</td>
</tr>
<tr>
<td>99453</td>
<td>Remote monitoring of physiologic parameter(s) (eg, weight, blood pressure, pulse oximetry, respiratory flow rate), initial; set-up and patient education on use of equipment</td>
</tr>
<tr>
<td>99457</td>
<td>Remote physiologic monitoring treatment management services, <strong>20 minutes</strong> or more of clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month</td>
</tr>
</tbody>
</table>
# Apps can be used to assist in care planning and care management

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>99483</td>
<td>Assessment of and care planning for a patient with cognitive impairment, requiring an independent historian, in the office or other outpatient, home or domiciliary or rest home, with all of the following required elements: Cognition-focused evaluation including a pertinent history and examination; Medical decision making of moderate or high complexity; Functional assessment, including decision-making capacity; Use of standardized instruments for staging of dementia; Medication reconciliation and review for high-risk medications; Evaluation for neuropsychiatric and behavioral symptoms, including depression, including use of standardized screening instrument(s); Evaluation of safety, including motor vehicle operation; Identification of caregiver(s), caregiver knowledge, caregiver needs, social supports, and the willingness of caregiver to take on caregiving tasks; Development, updating or revision, or review of an Advance Care Plan; Creation of a written care plan. Typically, <strong>50 minutes</strong> are spent face-to-face with the patient and/or family or caregiver.</td>
</tr>
<tr>
<td>99484</td>
<td>Care management services for behavioral health conditions, at least <strong>20 minutes</strong> of clinical staff time, directed by a physician or other qualified health care professional, per calendar month, with the following required elements: initial assessment or follow-up monitoring, including the use of applicable validated rating scales; behavioral health care planning in relation to behavioral/psychiatric health problems, including revision for patients who are not progressing or whose status changes; facilitating and coordinating treatment such as psychotherapy, pharmacotherapy, counseling and/or psychiatric consultation; and continuity of care with a designated member of the care team.</td>
</tr>
<tr>
<td>99487</td>
<td>Complex chronic care management services, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient, chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline, establishment or substantial revision of a comprehensive care plan, moderate or high complexity medical decision making; <strong>60 minutes</strong> of clinical staff time directed by a physician or other qualified health care professional, per calendar month.</td>
</tr>
<tr>
<td>99490</td>
<td>Chronic care management services, at least <strong>20 minutes</strong> of clinical staff time directed by a physician or other qualified health care professional, per calendar month, with the following required elements: multiple (two or more) chronic conditions expected to last at least 12 months, or until the death of the patient; chronic conditions place the patient at significant risk of death, acute exacerbation/decompensation, or functional decline; comprehensive care plan established, implemented, revised, or monitored.</td>
</tr>
</tbody>
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Collaborative Care Management and Transitional Care Management can be implemented with the assistance of apps

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
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<tbody>
<tr>
<td>99492</td>
<td>Initial psychiatric collaborative care management, first <strong>70 minutes</strong> in the first calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional, with the following required elements: outreach to and engagement in treatment of a patient directed by the treating physician or other qualified health care professional; initial assessment of the patient, including administration of validated rating scales, with the development of an individualized treatment plan; review by the psychiatric consultant with modifications of the plan if recommended; entering patient in a registry and tracking patient follow-up and progress using the registry, with appropriate documentation, and participation in weekly caseload consultation with the psychiatric consultant; and provision of brief interventions using evidence-based techniques such as behavioral activation, motivational interviewing, and other focused treatment strategies.</td>
</tr>
<tr>
<td>99494</td>
<td>Initial or subsequent psychiatric collaborative care management, each additional <strong>30 minutes</strong> in a calendar month of behavioral health care manager activities, in consultation with a psychiatric consultant, and directed by the treating physician or other qualified health care professional (List separately in addition to code for primary procedure).</td>
</tr>
<tr>
<td>99495</td>
<td>Transitional Care Management Services with the following required elements: Communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge Medical decision making of at least moderate complexity during the service period Face-to-face visit, within 14 calendar days of discharge</td>
</tr>
</tbody>
</table>
In some cases, reimbursements for apps may happen using codes for devices

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A9999</td>
<td>Miscellaneous DME supply or accessory, not otherwise specified</td>
</tr>
<tr>
<td>E1399</td>
<td>Durable medical equipment, miscellaneous</td>
</tr>
<tr>
<td>G0444</td>
<td>Annual depression screening, <strong>15 minutes</strong></td>
</tr>
<tr>
<td>G8431</td>
<td>Screening for depression is documented as being positive and a follow-up plan is documented</td>
</tr>
<tr>
<td>G8510</td>
<td>Screening for depression is documented as negative, a follow-up plan is not required</td>
</tr>
<tr>
<td>H0047</td>
<td>Alcohol and/or other drug abuse services, not otherwise specified</td>
</tr>
<tr>
<td>T1505</td>
<td>Electronic medication compliance management device, includes all components and accessories, not otherwise classified</td>
</tr>
</tbody>
</table>
The Problem with Time-Based Codes

• Limit the potential for increased efficiency
• Hinder the payment for self-directed services
• Lessen the ability of technology to be used to overcome the mental health provider shortage
• Pay for the process, not the outcome
Inconsistencies in Reimbursement

• Different payers have different requirements for the billing of mental health CPT codes
• Differences exist with respect to:
  • Whether payment is offered at all
  • Frequency with which billing for a code may occur per year
  • Frequency with which billing for a code may occur per day
  • Magnitude of the payment
• Due to these inconsistencies, it can be difficult for app developers to have the same financial model in all contexts
The Problem with Inter-Payer Inconsistencies in Reimbursement

**Payer A:** Allows 96127 to be billed twice per visit (two tests)

**Payer B:** Allows 96127 to be billed four times per day (four tests)

**Payer C:** Formerly only allowed 96127 to be billed once per year!
Surprise Co-Pays and Co-Insurances

- When an app is reimbursed as a procedure, patients may have out-of-pocket responsibilities like they would for any other procedure.
- When an app is used frequently, e.g. for measurement-based care, it can result in a lot of out-of-pocket costs.
- Patients are not accustomed to paying for services delivered at home.
- Billing 96127 four times a day could lead to a ton of surprise out-of-pocket charges!
Issues with Codeless Direct Payment

- Require the development of one-off contracts, which are a barrier to widespread adoption
- Negotiations must occur between the payer, employer, provider, and/or app developer
- Cost of contract negotiation may outweigh benefits, especially for low-cost interventions, as contracts are low volume
- Results in wide variation in coverage of apps across health plans and employers
- Hinders the development of high-quality apps, as their potential for reimbursement is unclear
- There is a reason why we have third party payers for most healthcare services, rather than direct payments from employers to providers
Prescription Digital Therapeutics

- Some app developers have sought FDA approval for their apps so that they may be sold as prescription digital therapeutics
- Oftentimes done in partnership with a large pharmaceutical company
- Process is expensive and time-intensive
- Potentially benefits app developers, as it is a barrier to entry
- Potentially hinders adoption, as many mental health providers cannot write prescriptions
  - Many psychologists can’t prescribe
  - Social workers can’t prescribe
Limitations of Existing Reimbursement Pathways

• Poor support for self-directed treatment
  • Currently reimbursed using paths intended for devices and drugs
  • Reimbursement pathways used are inconsistent across payers
  • Many mental healthcare providers can’t write prescriptions

• Emphasis on time-based billing
  • Barrier to increased efficiency
  • Barrier to improved access

• Poor uniformity across payers
  • One-off contracts make it hard to prospectively determine the business case for an app before it is developed
  • Differences across payers in reimbursement policies for specific codes make it difficult to validate business models even when applicable codes are available
Moving forward, we need to:

**Build consensus** on the nature of the challenges that apps currently face in obtaining reimbursement

**Build standardized, app-specific reimbursement codes** so that there is less of a need to classify them as devices, drugs, or labs, or to pair them with other services

**Build or modify codes** so that it is easier for reimbursement to occur when there is not a specific duration of involvement of a clinician or staff member
Questions

Adam C. Powell, Ph.D.
powell@payerprovider.com
(617) 939-9168

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