Background

Novel approaches to providing integrated behavioral health care (IBH) offer promise in improving access to integrated and coordinated physical and mental health care in primary or other clinical settings. Although research on these collaborative approaches shows benefit to clinical outcomes,\(^1\) payment for the additional resources required to provide IBH services varies by payer, region, and often, provider license.\(^2\) Investigating the different billing arrangements available for integrated care is essential to understanding the landscape of reimbursement approaches available to practitioners.

In 2018–2019, the University of Michigan Behavioral Health Workforce Research Center conducted a study to investigate current billing and payment approaches to covering IBH services. The study presents: (1) a resource use model to estimate the incremental costs used in providing IBH; (2) collection and analysis of IBH using procedure codes, relative value units, and fees paid by Medicare and Medicaid to the most common types of providers of these services; and (3) based on a systematic search of the literature, a typology of types of organizations, facilities, and providers most likely providing IBH or collaborative care services.

Methods

Conceptual model: Researchers constructed a conceptual resource use model that could estimate the per-patient/per-unit cost of an integrated care team. A financial modeling workbook created by the Advancing Integrated Mental Health Solutions (AIMS) Center at the University of Washington and the American Psychiatric Association was used as a template in conjunction with a managerial accounting approach in which fixed and variable costs contribute to total costs.

Reimbursement codes: To determine the resource use and costs for integrated and collaborative care in the context of Current Procedural Terminology (CPT) codes, codes were selected to bundle procedures and their resources by type of integrated care. The final price calculated for these codes represented the price variation that could not be explained by federal price determination, indicating how state Medicaid plans were valuing integrated care services relative to other states. These relative state reimbursement rates were transformed into box and whisker plots and interquartile ranges used to determine which state rates served as outliers.

Typology: Researchers built a typology using key characteristics of pre-existing IBH models identified through a literature review. This typology informed which organizations were contacted for semi-structured interviews, which provided insights into the planning, delivery, and financing for IBH.
Findings

Resource Use—Conceptual model: The final conceptual model, meant to capture the per-unit/per-patient cost of providing integrated care services, is applicable to both integrated care and to collaborative care programs (Figure 1). This model can be expanded or reduced to account for care team composition and reflects only the variable cost of providing IBH services. Variables A, B, and C refer to the percentage of the provider’s total commitment being dedicated to the provision of integrated care for one patient per time unit set by the CPT code. Full-time equivalents (FTE) refer to provider personnel type with associated annual salary, adjusted for geographic location of provided services.

**Figure 1.** Resource use model for one unit of integrated behavioral health care

\[
\text{Price}_{\text{IBH}} = A_{\text{medical provider}} \times \text{FTE}_{\text{Location}} \times \text{medical provider} + B_{\text{behavioral health specialist}} \times \text{FTE}_{\text{Location}} \times \text{behavioral health specialist} + C_{\text{care manager}} \times \text{FTE}_{\text{Location}} \times \text{care manager} + \text{Supplies}
\]

where resource use, Price, is a function of provider type, salary, site of services (facility type and location), and time to deliver integrated care services.

Resource Use—Reimbursement Codes: Based on the formula in Figure 1, researchers expected resource use values to be comparable to the 2019 Medicare conversion factor of $36.0391. However, adjusted reimbursement rates were on average less than the conversion rate, suggesting these clinical practices may be subject to a financial disincentive. Psychiatric collaborative care had the highest average reimbursement rate, followed by complex chronic care management. The mean adjusted reimbursed rates across eight integrated behavioral health CPT codes were more similar within states than across states, leading to a hypothesis that pricing based on resource use cannot be explained by the Centers for Medicare and Medicaid Services’ federal pricing mechanism.

Integrated Behavioral Health Care—Model Typology: Three IBH general care categories were identified: (1) behavioral health specialist and primary care provider employed within the same department and institution, (2) behavioral health specialist and primary care provider employed in different departments in the same institution, and (3) behavioral health specialist and primary care provider employed by different institutions.

**Figure 2.** Typology of integrated care models

<table>
<thead>
<tr>
<th>Affiliate institution</th>
<th>Location</th>
<th>Care type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid health home</td>
<td>Urban</td>
<td>Same department and institution</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>Veterans Health Administration</td>
<td>Rural</td>
<td>Same department, different institution</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td>Academic medical center</td>
<td>Multiple settings</td>
<td>OR</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td>Different department and institution</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</tr>
</tbody>
</table>
Conclusions

This study identifies possible inefficiencies in paying differently for similar services by examining the variations in procedure codes and fees paid by government payers across states for the incremental integrated care services. Policymakers designing reimbursement for IBH should consider how variation in financing influences how providers submit different CPT codes that may be used for similar integrated care services. Additionally, state and federal regulators are advised to recognize the inefficiencies in the market and in health systems from potential rate manipulation and economic policy incentives. The field would benefit from future research on current billing and payment approaches for resources consumed in providing high quality, efficient, accessible integrated behavioral health services in person and through telehealth technology. Given the importance of the basic procedural coding, wage adjustment, and geography to rate determination, within-state and across-state variation warrants attention to insure access to those in need.

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References