Digital Therapeutics & The Role of the Pharmacist

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Agenda

- What are Digital Therapeutics?
- FDA’s Proposed Frame for “Prescription Drug-Use-Related Software”
- Role of the Drug Compendia & Stakeholder Impact
- Data Availability & The Pharmacists’ Role
Defining Digital Therapeutics

“Digital therapeutics (DTx) deliver evidence-based therapeutic interventions to patients that are driven by high quality software programs to prevent, manage, or treat a broad spectrum of physical, mental, and behavioral conditions. They are used independently or in concert with medications, devices, or other therapies to optimize patient care and health outcomes.”

–Digital Therapeutics Alliance

Additional functionality of DTx:
• Integrate with mobile health platforms
• Pair with devices, sensors, or wearables
• Deliver interventions remotely
• Integrate into EHR and e-prescribing platforms
• Provide diagnostic or adherence interventions

Digital Therapeutics is a subset of the broader term, Digital Health, which includes telemedicine, health IT, wireless medical devices, and many other areas.

Source: https://www.dtxalliance.org/
Digital Therapeutics Are Not…

- Health or wellness apps
- Pure-play diagnostic products
- Clinical decision support tools
- Telehealth platforms
- Predictive analytic products
- Digital tools used to support drug trials
- Pure-play adherence tools
- Telemedicine systems
Digital Therapeutic Core Principals
Per The Digital Therapeutics Alliance (DTA)

1. Prevent, manage, or treat a medical disorder or disease
2. Produce a medical intervention that is driven by software, and delivered via software or complementary hardware, medical device, service, or medication
3. Incorporate design, manufacture, and quality best practices
4. Engage end users in product development and usability processes
5. Incorporate patient privacy and security protections

6. Apply product deployment, management, and maintenance best practices
7. Publish trial results inclusive of clinically-meaningful outcomes in peer-reviewed journals
8. Be reviewed and cleared or approved by regulatory bodies as required to support product claims of risk, efficacy, and intended use
9. Make claims appropriate to clinical validation and regulatory status
10. Collect, analyze, and apply real world evidence and product performance data
Categories of DTx

The Digital Therapeutics Alliance (DTA) has designated four categories of digital therapeutics based on the products’ intended uses and official product claims.

Examples of Digital Therapeutics

**reSET from Pear Therapeutics**
- FDA-authorized prescription product for Substance Use Disorder (SUD)
- Interactive treatment module delivery cognitive behavioral therapy, and the app allows clinicians to follow patient-report substance abuse, cravings, and triggers.

**Propeller from Propeller Health**
- A sensor attaches to a patient’s current inhaler and tracks medication usage to help manage asthma and COPD
- Creates reports that can be shared with physicians to adjust medications

**Insulia from Voluntis**
- Recommends basal insulin doses for patient based on blood glucose goals and dosing entered by the physician. The patient enters their blood glucose readings, time tested, and hypoglycemia information; Insulia gives a dose recommendation
FDA’s Proposed Framework for “Prescription Drug-Use-Related Software”
Background

• In November 2018, the FDA issued a request for comment for their proposal for a new framework on prescription drug-use-related software.
• The eventual guidance would provide regulations on software applications that are used with one or more prescription drug products.
• FDA’s goal is to support digital health and provide software flexibility, while implementing the necessary safety measures.
• Agency established a docket for public comment, which was originally expected to close January 22, 2019.
• FDA extended the comment period until April 29, 2019.
Definition and Exclusions

- **Prescription Drug-Use-Related Software**: Software disseminated by or on behalf of a drug sponsor that accompanies one or more of the sponsor’s prescription drugs, including biological drug products. The output from this software would be treated as drug labeling.
  - e.g. screen displays, sounds, audio messages

What is not covered under the framework?

1. Stand-alone software that does not accompany a prescription drug
   - e.g. software that analyzes a skin lesion to determine if it contains cancerous cells
2. Clinical decision support software intended for use by healthcare providers
3. Software developed by companies or individuals who are unaffiliated with the drug sponsor, even if the developer’s intention is for the software to be used with one or more prescription drugs
Examples of Software that Could be Prescription Drug-Use-Related Software

- Software branded with a drug name that allows patients to track and record their use of the sponsor’s drug via app
- Software that enables a healthcare provider to enter dosing instructions for a sponsor’s drug product that a patient can retrieve via app (e.g. sliding scale insulin)
- Software designed by a drug sponsor that communicates with a device in a drug-led, drug-device combination product
- An app that communicates with a device embedded in a tablet of a specific drug to automatically record when the tablet has been ingested.
- Software branded with a drug name and disseminated by or on behalf of the drug sponsor that allows patients to record their degree of physical functioning while taking the drug.
Examples of Prescription Drug-Use-Related Software Outputs

- Screen display where a patient can enter a record of their ingestion of the drug and see a record of their ingestion over time.
- Screen display where patients can enter their symptoms or view a summary of their activity or symptoms.
- Display of step counts or blood pressure measures if received directly from a separate device, such as a step counter.
- Screen display of dosing instructions that the patient can receive through the app.
- Screen display of a risk calculator used to calculate risk and dosing for a cholesterol-lowering drug.
- Screen displays that show a drug’s ingestion from a device embedded in a tablet.
- A message to a patient from an app reminding the patient to take the sponsor’s medication.
- The sounds, vibrations, or audio message from an alert or reminder in the sponsor’s app.
Two Types of Drug Labeling

- **FDA-Required Labeling**
  - Labeling drafted by the manufacturer that is reviewed and approved by the FDA as part of an NDA, ANDA, or BLA.
  - e.g. the Prescribing Information

- **Promotional Labeling**
  - "Labeling or advertising devised as promotion" of a drug product. Submitted at the initial dissemination or publication of such labeling or advertising.
  - FDA anticipates that most prescription drug-use related software output would be promotional labeling.

- Although promotional labeling is submitted to FDA’s Office of Prescription Drug Promotion (OPDP), FDA does have a voluntary advisory comment process where manufacturers can receive FDA comments before disseminating proposed promotional labeling.

- The proposed framework recommends that sponsors use that voluntary advisory comment process.
### FDA-Required Labeling vs. Promotional Labeling

<table>
<thead>
<tr>
<th>FDA-Required Labeling</th>
<th>Promotional Labeling</th>
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<tbody>
<tr>
<td>Likely required in two situations:</td>
<td></td>
</tr>
<tr>
<td>1. When the sponsor demonstrates to the FDA that there is substantial evidence of an</td>
<td>• Devised, at last partially, to promote use of a sponsor’s prescription drug.</td>
</tr>
<tr>
<td>effect on a clinically meaningful outcome as a result of using the prescription drug-</td>
<td>• Submitted to the FDA at the time of initial dissemination along with Form FDA 2253,</td>
</tr>
<tr>
<td>use-related software</td>
<td>screenshots of what the user with experience, and a copy of the drug’s professional</td>
</tr>
<tr>
<td>2. When the prescription drug-use-related software provides a function or information</td>
<td>labeling.</td>
</tr>
<tr>
<td>that is essential to one or more intended uses of the drug-led, drug-device</td>
<td>• Examples:</td>
</tr>
<tr>
<td>combination product of which such software is or is a part of a device constituent</td>
<td>• App that reminds providers of testing, consistent with FDA labeling, needed</td>
</tr>
<tr>
<td>part • e.g. Abilify MyCite</td>
<td>before prescribing a drug</td>
</tr>
<tr>
<td></td>
<td>• An app that lets patients track their severity of symptoms of their condition</td>
</tr>
<tr>
<td></td>
<td>• A branded medication dosing reminder app</td>
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FDA Recommended Categories of Prescription Drug-Use-Related Software for Agency Advisory Comment

- There are categories of prescription drug-use-related software output that the FDA recommends be submitted to the Agency in advance of dissemination, using the existing voluntary process for requesting advisory comment.

- These categories are requested because the use of the prescription drug-use-related software output may increase the potential for harm to health of patients compared to use of the drug without such output.

(1) Output instructs patients on when to adjust their dose based on symptoms without first consulting a HCP

(2) Output recommends when a patient should contact a HCP based on symptom-related information
Role of the Drug Compendia & Stakeholder Impact
Abilify MyCite in the Drug Pricing Compendia

**Medi-Span**
Differentiated the products by assigning different “strengths”.

<table>
<thead>
<tr>
<th>NDC</th>
<th>GPI</th>
<th>Product Name</th>
<th>GPI 14 – Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>59148000813</td>
<td>5925001500032</td>
<td>Abilify Oral Tab 10 MG</td>
<td>Aripiprazole Tab 10 MG</td>
</tr>
<tr>
<td>59148003185</td>
<td>5925001500037</td>
<td>Abilify MyCite Oral Tablet 10 MG</td>
<td>Aripiprazole Tab 10 MG with sensor</td>
</tr>
</tbody>
</table>

**First Databank**
Differentiated the products in the dosage form field.

<table>
<thead>
<tr>
<th>NDC</th>
<th>GCN</th>
<th>Label Name</th>
<th>Generic Name</th>
<th>Strength</th>
<th>Dosage Form</th>
<th>Route of Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>59148-0008-1</td>
<td>638537</td>
<td>ABILIFY 10 MG TABLET</td>
<td>aripiprazole 10 mg</td>
<td>TABLET</td>
<td>ORAL</td>
<td></td>
</tr>
<tr>
<td>59148-0031-1</td>
<td>884438</td>
<td>ABILIFY MYCIT 10 MGKIT</td>
<td>aripiprazole 10 mg</td>
<td>TABLET WITH SENSOR AND PATCH</td>
<td>ORAL</td>
<td></td>
</tr>
</tbody>
</table>

**Cerner Multum**
Unknown; Cerner Multum had not listed Abilify MyCite as of May 1st.

**Red Book**
No differentiation of Abilify from Abilify MyCite in fields affecting pharmaceutical equivalence.

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Product Name</th>
<th>Active Ingredient</th>
<th>Form</th>
<th>Strength</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>59148-0008-1</td>
<td>ABILIFY</td>
<td>aripiprazole</td>
<td>TAB</td>
<td>10 mg</td>
<td>ORAL</td>
</tr>
<tr>
<td>59148-0031-1</td>
<td>ABILIFY MYCIT</td>
<td>aripiprazole</td>
<td>TAB</td>
<td>10 mg</td>
<td>ORAL</td>
</tr>
</tbody>
</table>
## Impact on Stakeholders

<table>
<thead>
<tr>
<th>Payers</th>
<th>Physicians</th>
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<tr>
<td>• Compendia differentiation may promote payer coverage, notwithstanding rebate differences.</td>
<td>• A lack of differentiation in the generic name field can complicate e-prescribing in systems requiring e-prescribing via chemical name.</td>
</tr>
<tr>
<td>• Substantial cost differences may result in the implementation of utilization management edits.</td>
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</tbody>
</table>
### Impact on Stakeholders

<table>
<thead>
<tr>
<th>Patients</th>
<th>Pharmacies</th>
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</table>
| • Unique GPIs/GCNs increase the likelihood of the patient getting the product intended by their physician. | • Pharmacies need to be able to properly distinguish between the two products in their software dispensing systems and in wholesaler ordering systems.  
• Unique GPIs/GCNs may mitigate substitution concerns between the two products. |
Data Availability & The Pharmacists’ Role
Roles for Pharmacists

- Recommend and/or prescribe digital therapeutics, receive results, and help monitor a patient’s therapy.  
  • May require payers to cover Remote Patient Monitoring by a pharmacist

- Counsel patients on the use of prescription drug-use-related software so that patients understand the software component and use the product correctly.

- Educate patients about the availability of these products and their use along with traditional prescription drugs.

- Direct patients to the appropriate channels, as digital therapeutic products may not be processed through the regular retail pharmacy channels.
Questions for the Industry?

• Is a prescription drug-use-related software component enough to differentiate a drug from an otherwise pharmaceutically equivalent agent?

• Will drug compendia's’ treatment of Abilify MyCite set the new standard for the industry?

• How will payers react to these new prescription drug-related software products? Will they be covered at the same tier as the stand-alone drug or will they be available at a premium? Will managed care edits be applied, such as prior authorizations or step therapy edits?

• When will we see more widespread coverage for digital therapeutic apps?

• What will pharmacies dispense, if anything, when they receive a prescription for a digital therapeutic product?

• How will pharmacists be reimbursed for “dispensing” digital products?
## Coverage Under Medical or Pharmacy Benefits?

<table>
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<tr>
<th>Medical</th>
<th>Pharmacy</th>
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<tbody>
<tr>
<td>• Billed under non-specific J-codes</td>
<td>• Billed using specific NDC codes</td>
</tr>
<tr>
<td>• Availability of HCP/CPT codes to bill for physician time</td>
<td>• Real-time claims processing only allows billing for product itself</td>
</tr>
<tr>
<td>• Patients are subject to an annual deductible and plans are slow to update medical billing and claims systems</td>
<td>• Limited to drug formularies</td>
</tr>
<tr>
<td>• Deductible or co-insurance</td>
<td>• Per-fill copay plus annual deductible/co-insurance</td>
</tr>
</tbody>
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Express Scripts’ Stand-Alone Digital Health Formulary for 2020

- The PBM will be releasing a stand-alone formulary in 2020 covering digital health tools.
- The formulary will focus on tools to prevent and manage:
  - Diabetes
  - Cardiovascular conditions
  - Behavioral conditions
  - Pulmonary conditions
  - More chronic and complex conditions to come

- Four benefits outlined by ESI:
  1. Assure that a digital health product has been objectively vetted for clinical use and deployment
  2. Reduce burden in terms of contracting and managing digital health companies
  3. Reduce costs due to the scale and purchasing power of the pharmacy benefit manager
  4. Establish a new pathway for prescription-only digital therapeutics looking to enter the market.

Questions?

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