Crowdsourcing: Uber Brainstorms That Drive Innovation In Behavioral Healthcare

The 2016 OPEN MINDS Strategy & Innovation Institute
Wednesday, June 8, 2016 | 2:00pm – 3:15pm

Sharon Hicks, Senior Associate, OPEN MINDS
Agenda

1. Understanding The Crowdsourcing Concept
2. Best Practices In Crowdsourcing
3. How To Use Crowdsourcing To Develop New Service Lines In Health & Human Services: A Case Study From Alexander Youth Network
   a. Carolyn Spence, Chief Information Officer, Alexander Youth Network
   b. Jennifer Greene, Vice President, Alexander Youth Network
4. Questions & Discussion
Understanding The Crowdsourcing Concept
Crowdsourcing: What Is It?

- Today we will define crowdsourcing as a method of solving problems through the contributions of multiple people.
  - Can be virtual or in-person
  - Can be open or by invitation only
- Two factors explain why crowdsourcing works:
  - Diverse inputs drive superior solutions
  - Cognitive diversity requires spanning gaps in social networks
- Crowdsourcing is designed to:
  - Help us use design and use-patterns that guide us to breaking down work into meaningful units
  - Edit the findings to a cohesive whole (e.g., help a whole industry or technical area move forward)
Crowdsourcing & Innovation

The aggregation of information in groups results in decisions that are often better than could have been made by any single member of the group – or “the group is more than the sum of its parts”

How do we harness this powerful tool in our behavioral health industry?
Examples Of Crowdsourcing

- Lego - allows users to design new products, and at the same time, test the demand. Any user can submit a design, then other users (potential buyers) vote for the ones that they like (the ones that they want to purchase). The idea with the most votes gets moved to production and the creator gets a royalty.

- Samsung - use crowdsourcing to seek ideas about creative uses for existing electronic products and technologies. Ideas that are used result in royalties for the creator.

- Wikipedia - a crowdsourced encyclopedia.

- Google - use crowdsourcing for the Google doodles and to determine the subject of the doodles.

- Other examples: Kickstarter, GoFundMe, DonorsWhoChoose, etc.
Using Crowds To Solve Big Problems

- In math, physics, natural sciences, etc., there are many examples of using crowds to solve technical problems. There are example of using panels of experts to:
  - Create technical taxonomies
  - Solve equations
  - Critique and/or suggest methodology for innovation

- In our industry, we use our collective knowledge to:
  - Improve our individual bottom lines
  - Improve care to our consumers
  - Improve outcomes/quality

- How do we move from empirical learning/innovation to crowd-based learning?
Crowdsourcing Can Be Completed In Different Ways

- In person-focus groups
- At a conference – formally or informally
- Via technology – virtual groups
Best Practices In Crowdsourcing
Best Practices In Crowdsourcing

- Choose the approach that's right for your desired outcome
  - Collective intelligence: firms like Innocentive use the crowd to solve complex problems
  - Creation: Agencies like Ad Hack connect companies with creative talent
  - Voting: Brands like Mountain Dew let users vote on the look of new brands
  - Funding: Sites like Kickstarter raise money through the crowd

- Eliminate, or control for, the influence of outliers (mischief makers)
  - Stephen Colbert got his fans to change Wikipedia entry on elephants
  - Island Records crowdsourced tour plans for Justin Bieber to North Korea
Best Practices In Crowdsourcing

- Include people who are not in your field
  - Can often provide insights that are helpful

- Be aware of the risks of “analysis paralysis”
  - Correlation is not causation
  - Not all data are important to fully understand

- Make sure you understand the parameters of the crowd
  - Better to have a wide net for information and idea gathering and a small group for ultimate decision making

- Have an ultimate leader or decision maker
  - You have to have an internal person who is willing to stand up and take responsibility
  - You still have to operationalize the decision so make sure it’s practical
What Does This Mean For Our Industry?

- Using the innovation ideas from our staff in the field
- Empowering consumers to have a meaningful voice in the work that we do
- Developing performance standards that measure more than process
- Being proactive rather than reactive
  - Advocating for changes or exceptions in regulatory oversight
How To Use Crowdsourcing To Develop New Service Lines In Health & Human Services: A Case Study From Alexander Youth Network

Carolyn Spence, Chief Information Officer, Alexander Youth Network
Jennifer Greene, Vice President, Alexander Youth Network
Crowdsourcing: Uber Brainstorms that Drive Innovation in Behavioral Healthcare
Mission Statement

Alexander Youth Network provides quality professional treatment to children with serious emotional and behavioral problems. We deliver an effective and efficient array of services, enabling children and their families to exercise self determination, achieve their potential, and find long-lasting positive ways to connect with their community.
Internal Challenges

• Multiple Locations
• Staff feeling disconnected/not supported
• Limited pool of resources
• “Communication” rated low on employee satisfaction
That’s where Yammer fits in!

Yammer is the private and secure enterprise social network through which Alexander Youth Network employees connect, collaborate and coordinate.

Yammer makes work:
- Real-time
- Social
- Mobile
- Collaborative
- Contextual
Lauren Anderson  -- March 23 at 8:48pm from iPhone

We spent our Friday at Walker Bickett doing a very simple, but fun sensory activity using water and shaving cream. The kids had a blast digging for treasures hidden in the shaving cream. Although the kids got messy, they accomplished the goal of furthering their sensory knowledge. The activity was a major success.

cc: Lena Patel and Joanna Zahra

Joanna Zahra  -- March 22 at 9:54am from Android

Anyone have a good safety plan that is specific to run away behaviors they want to share? Just reviewed my old one and I don't like it anymore!

Buddy Plummer  -- March 23 at 9:35am from iPhone

MST does good safety plans for elopement. Amy Hooper or Tahara Jones any ideas you can share?

cc: Amy Hooper and Tahara Jones

Kelly Smoak  -- March 30 at 3:12pm from iPhone

The Panthers, Lion’s Den, and Busy Bees took a group field trip today to practice our coordination, deep breathing and relaxation at a labyrinth. After returning to campus, we spent time drawing our own. Hopefully this summer we will spend some time creating our own labyrinth at our campus!

cc: Cherral Moore, Michele Al-Bayati, Todd Bradley, and Rodney English
Jesse Horn -- February 1 at 4:23pm
Mr. Craig Bass, I’m taking you up on your offer to answer questions on yammer per Management Team meeting last week. Here is my question.

Is there anything being done on a state level, to allow mental health agencies to more easily serve clients that do not qualify for Medicaid? Currently, it is a requirement for my program that all kids have active Medicaid. The school district has indicated that there are a lot of other kids they could refer, but simply cannot due to the fact that they expand.

cc: Craig Bass

Ann Church, Amanda Ward, LaFondras Peterson, and 3 others like this

Craig Bass -- February 1 at 4:56pm
Jesse Horn, thanks for this question. I am hoping that more folks will use Yammer to share their questions and thoughts. I appreciate your interest in seeing that kids who do not have Medicaid are able to get the services they need. It’s ironic that Medicaid recipients are able to get a broader array of services than those on private insurance! Unfortunately, what we are currently seeing is a decline in state funding rather than an increase. To be honest, I don’t expect to see this change expand.

cc: Jesse Horn

April Wallace, Sandra Pizzaro, Jesse Horn, and 2 others like this

Jesse Horn -- February 1 at 9:02pm from iPhone
Thanks Craig Bass! I hope we will eventually see this issue addressed. Thanks for the info! In the meantime, we will continue to serve the ones we can to the best of our ability.

cc: Craig Bass

April Wallace and Lena Patel like this

Craig Bass in reply to Jesse Horn -- February 2 at 9:23am from iPhone
And remember to let your legislators in Raleigh know how you feel about this and other matters related to the public mental health system. You can find out who represents you by visiting www.ncleg.net.

Jesse Horn likes this

Jesse Horn -- February 4 at 5:05pm from iPhone
Will do!

Write a reply

Craig Bass -- October 14, 2015 at 4:45pm
Let’s Focus on Discharge Planning!

One of our MCO2 partners recently asked me to work on improving our discharge/aftercare planning for kids in our programs. Doing so is very consistent with our discussions during the recent Staff Chats. Please take a minute to read my article, attached, and let me know what you think. Thanks!

Tarenya Williams, Charles Tucker, LaFondras Peterson, and 5 others like this

Lori Douglas -- October 15, 2015 at 9:44am
Great timing! The focus of our train this round includes Discharge Planning and I have been discussing how to best communicate and document this process!
Bringing the conference room to every PC
Regional Challenges

- Early adoption of DSM5
- Continued billing of ICD9

- Conversion of ICD 9 to ICD 10

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,000 billing codes</td>
<td>68,000 billing codes</td>
</tr>
</tbody>
</table>
Solution based Crowdsourcing

Interdisciplinary/Inter-agency approach to Uber brainstorming:
  • Software challenges
  • Workflow challenges
  • Future Challenges

Software challenges:
  • DSM 5 descriptors a lot longer and more complex
  • ICD 9 mapping to many DSM 5 descriptors
  • DSM5 does not adopt the same coding break down as DSM4

Crowdsourcing Ideas
  • Customize software solution
  • Adopt the one to many code to code approach
  • Un-complicate the Diagnosis Descriptors by loading all possible descriptors and corresponding specifications
Workflow Challenges

• Updating hundreds of patient records
• Ensuring UM requirements for concurrent requests

Crowdsourcing Ideas

• Session specific reminders
• Identified project manager per agency
• UM procedure changes
• Earlier adoption than state proposed timeframe

Future Challenges

• ICD 10 implementation
• Medical Diagnoses

Crowdsourcing Ideas

• Build in ICD 10 crosswalk
• Attach all DSM5 diagnosis descriptors to a corresponding ICD 10
• Incorporate common medical conditions in DSM5 descriptor library with corresponding ICD9 and ICD10 code sets
Result

Early Adoption of DSM 5

- Interdisciplinary group provided valuable insight to MCOs regarding preparedness
- Extensive DSM5 library ensured specifications were addressed where applicable
- Clinician’s had adequate amount of time to meet with patients and meet timeline requirements
- Planning for future implementation ensured successful transition
Industry Challenges

• Taking too long to complete assessment documentation requirements (hence reduced productivity, hurts bottom line – paying clinicians to document vs seeing clients)

• No room in schedules to fit more clients in

• High staff turnover due to expectations for seeing more clients and getting documentation done w/in 24 hours.

• Frustrated clients/families and/or community partners – taking too long to get clients into services they need due to delay in completing documentation.

• Frustrated clinicians – spending more time on paperwork vs seeing clients
AYN Priorities

• Efficiency – increase productivity, seeing more clients, decreasing redundancy
• Concurrent Documentation
• Reducing Risk – ensuring all required information is obtained
• Getting Clients into services quicker

Conferences/Meetings/Webinars – Oh My - Crowdsourcing Opportunities

• Turn a checkbox into a sentence
• Don’t overwhelm with too many text boxes
• One stop shop – no jumping all over the place
• Make the application work for you
* Automatic calculations - clinician’s are not doing math
* Automatic Recommendations based on responses ensuring priority follow up is considered
* Prompts for additional information requirements based on responses to questions
* Built in workflow - module based to prevent jumping around from form to form and possibility of missing important information
I. Identifying Information and Problem Statement:

Adoptive Living Arrangements: Shelia is a 15-year-old female in need of a permanent home. Shelia was removed from her birthhome due to neglect and abuse. Shelia is currently being cared for by her foster parents. The foster parents have expressed a desire to adopt Shelia. Adoptions can take place in the state of Maryland. The court has granted permission for Shelia to be adopted.

II. Medical History:

Shelia has been in foster care since the age of 3. She has been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and has been prescribed medication. Shelia has been in therapy for anxiety and depression.

III. Treatment Plan:

Shelia is currently receiving therapy for anxiety and depression. Her foster parents have expressed a desire to adopt Shelia. The court has granted permission for Shelia to be adopted.

IV. Cultural Consideration:

Cultural background: Shelia is a African American female. She was born in the United States. She has been in foster care since the age of 3. Shelia has been diagnosed with ADHD and has been prescribed medication. She has been in therapy for anxiety and depression.

V. Strengths, Abilities, and Preferences:

Strengths: Shelia is intelligent and has a strong work ethic. She is a good athlete and has been playing soccer since the age of 5. Shelia is a good student and has been receiving good grades.

Abilities: Shelia is skilled in sports and has been playing soccer since the age of 5. She is a good student and has been receiving good grades.

Preferences: Shelia is a female who wants to be adopted. She is a good athlete and has been playing soccer since the age of 5. Shelia is a good student and has been receiving good grades.

VI. Adoptive Living Arrangements:

Adoptive Living Arrangements: Shelia is in need of a permanent home. She is currently being cared for by her foster parents. The foster parents have expressed a desire to adopt Shelia. Adoptions can take place in the state of Maryland. The court has granted permission for Shelia to be adopted.

VII. Recommendations for Adoptive Living Arrangements:

1. Shelia needs a stable home environment.
2. Shelia needs a supportive family who can provide her with the love and care she needs.
3. Shelia needs to be able to maintain a close relationship with her biological family.

VIII. Substance Use:

There is no evidence of substance abuse.

IX. Family:

Family history: Shelia was removed from her birthhome due to neglect and abuse. The family has a history of alcohol and drug use. Shelia's foster parents have a history of alcohol and drug use. Shelia has been in foster care since the age of 3.

X. Terms:

Shelia's terms: Shelia needs a stable home environment. She needs a supportive family who can provide her with the love and care she needs. Shelia needs to be able to maintain a close relationship with her biological family.

XI. Treatment Plan:

Shelia is currently receiving therapy for anxiety and depression. Her foster parents have expressed a desire to adopt Shelia. The court has granted permission for Shelia to be adopted.

XII. Problem Areas:

1. Shelia needs to improve her social skills.
2. Shelia needs to improve her academic skills.
3. Shelia needs to improve her coping skills.

*Checkboxes and pick list based responses are turned into sentences
*Hours of typing up text is gone
*Increased metrics for analysis
Outcome

• Prior to CCA in CDT – about 2 hours in session Face to Face time and then about an additional 2 hours of documentation time

• Now – 1 hour in Face to Face time, clinician’s doing concurrent documentation resulting in about 85% of assessment complete as client walks out door. Then another 30 to 45 minutes to finish up.

• User Perspective –
  • Way better than the narrative format previously being used
  • I did think it was easy to say a lot of stuff but not say anything at all in terms of clinical pertinence. The CCA in CDT ensures the issues are being targeted.
  • liked the ease of the setup and how easy it is to type while meeting with the family
  • Ease of access for others to view information prior to fully signing off, great when consulting internally with other professionals
  • entrance criteria section built in which automatically gets us thinking/building a case to why the service is needed that we are recommending
Crowdsourcing Challenges

- Inundated with ideas
- Not Everything works
- Necessary to use process for prioritizing
- Plan, Do, Check, Act
Questions & Discussion