DEVELOPING SUBSTANCE USE NAVIGATION: INTEGRATED EDUCATION AND MOBILE HEALTH TRACKING FOR COLLEGE STUDENTS
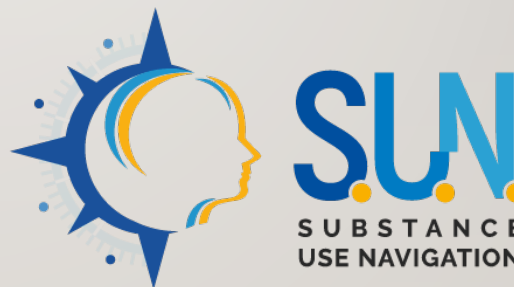
BARBARA "BASIA" ANDRAKA-CHRISTOU, J.D., PH.D.

ANDRIY KOVAL, PH.D.
HEALTH MANAGEMENT & INFORMATICS, UCF
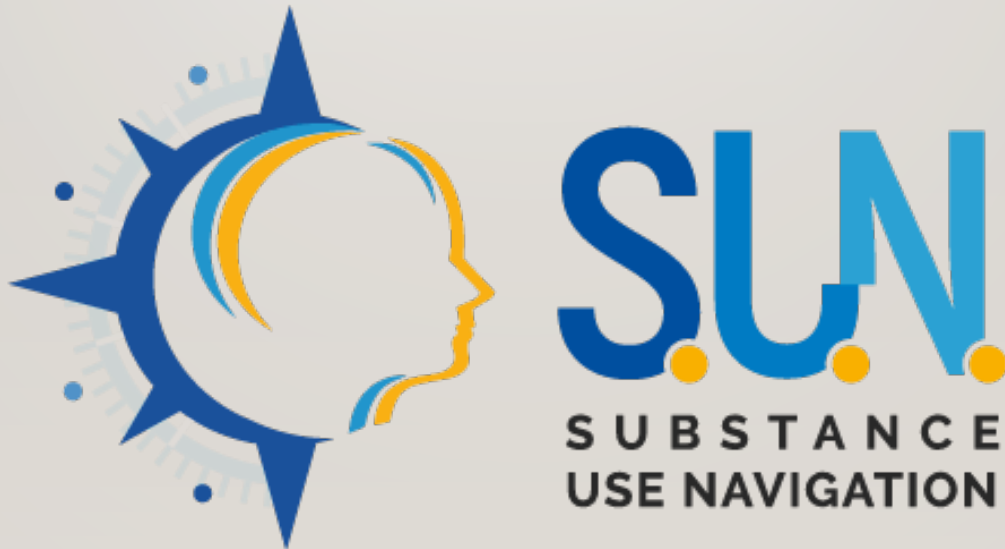
PARTNERS & RESEARCH PERSONNEL

- Jody Madeira, J.D., Ph.D., Principal Investigator, Indiana University

- Basia Andraka-Christou, J.D., Ph.D., Co-Principal Investigator, University of Central Florida

- Andriy Koval, PhD, Coinvestigator, University of Central Florida

- Enfoglobe LLC (technology vendor)

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HTTPS://EXPLORESUN.COM/

SUN GOALS: COLLEGE SETTING

INCREASE STUDENT KNOWLEDGE OF SUDS AND TREATMENTS

PROMOTE POSITIVE ATTITUDES TOWARDS PEOPLE WITH SUDS AND TREATMENTS

IMPROVE THERAPEUTIC ALLIANCE BETWEEN STUDENTS & COUNSELORS

INTERVENTIONS

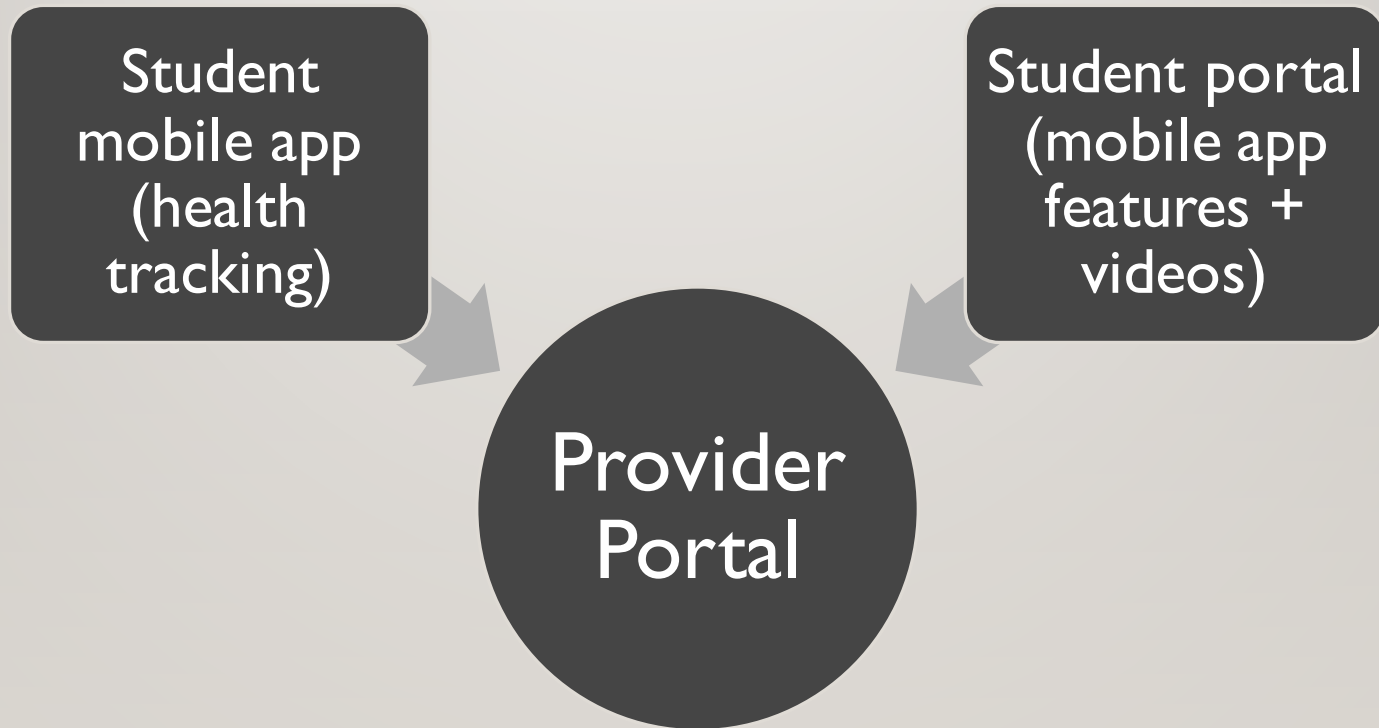Student portal with educational videos

Student mobile health tracking application

Provider portal (see mobile data & video progress)

THE SYSTEM

Student mobile app (health tracking)

Student portal (mobile app features + videos)

Provider Portal

Aim	Intervention(s)	Evaluation method(s)
1) Examine effect of **SUD** videos on student **SUD** knowledge/attitudes	Student portal w/ videos	Pre-post test (before video, after video, 3 months later)
2) Examine effect of treatment videos on student treatment knowledge/attitudes	Student portal w/ videos	Pre-post test (before video, after video, 3 months later)
3) Examine effect of mobile health app, student portal (w/videos) & provider portal on therapeutic alliance	Mobile health app, student portal w/ videos, & provider portal	Working Alliance Inventory instrument at enrollment & 1 month later
4) Identify implementation outcomes and barriers/facilitators of **SUN**	Mobile health app, student portal w/ videos, & provider portal	Interviews w/ counselors & students; SUN usage data; Enlight usability & acceptability survey

COMPONENT #1: VIDEOS (IN STUDENT PORTAL)

LESSONS LEARNED: VIDEO DESIGN/DEVELOPMENT

- 3-5 minute videos

- Relatable but genderless animated figure

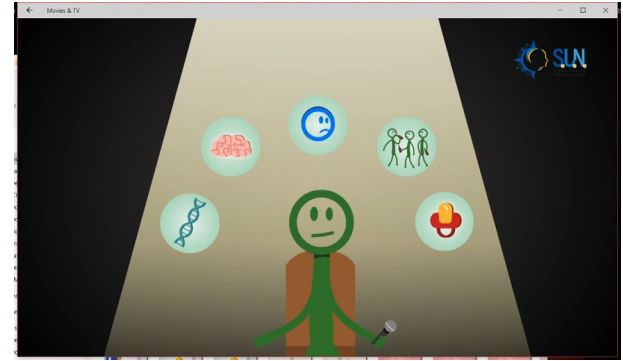- Balanced message (esp. alcohol & marijuana)

- Short-term rather than long-term effects

- Narrative story telling PLUS science

Andraka-Christou, B., Alex, B., Madeira, J. College Student Preferences for Substance Use Disorder Educational Videos: A Qualitative Study. *Subst Use Misuse*, 2019;54(8):1400-1407.

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LESSONS LEARNED:
MOBILE APP DESIGN/DEVELOPMENT

8 or fewer questions per day; select time

See changes & relationships between variables

Toggle option to "turn off" sharing w/ provider

Originally: just daily questions [can share w/ provider]

How is your day going? (ordinal)

How is your day going - Why? (MC)

How are you feeling? (ordinal)

How are you feeling - Why? (MC)

How strong are your cravings? (ordinal)

How confident are you that you won't use? (MC)

What have you done for yourself today? (MC)

Additional [cannot share w/ provider]

Resources

Gratitude list

Daily goals list

Free write journal

Is now a good time to check-in?

YES • • • • • • ◉

Please slide to select your answer.

MAIN MENU

My Statistics

Journal

Resources

Daily Goal Tracker

Gratitude List

Settings

Original questions (by advisory board with some student feedback)

Click on the question below
to see analytics for that question

| How is your day going? |
| How is your day going-why? |
| **How are you feeling?** |
| How are you feeling-why? |
| How strong are your cravings? |
| How confident are you that you won't use? |
| What did you do for yourself today? |

BACK   NEXT

How are you feeling?

1) literature review for validated instruments → none for this population for daily use on a mobile phone about both SUD and MH

2) Focus grouped 2 facially most appropriate instruments (CHU9D & Warwick-Edinburgh) with students → assessed usefulness, clarity

3) Focus group results from thematic analysis → modified some questions, kept original wording of some questions
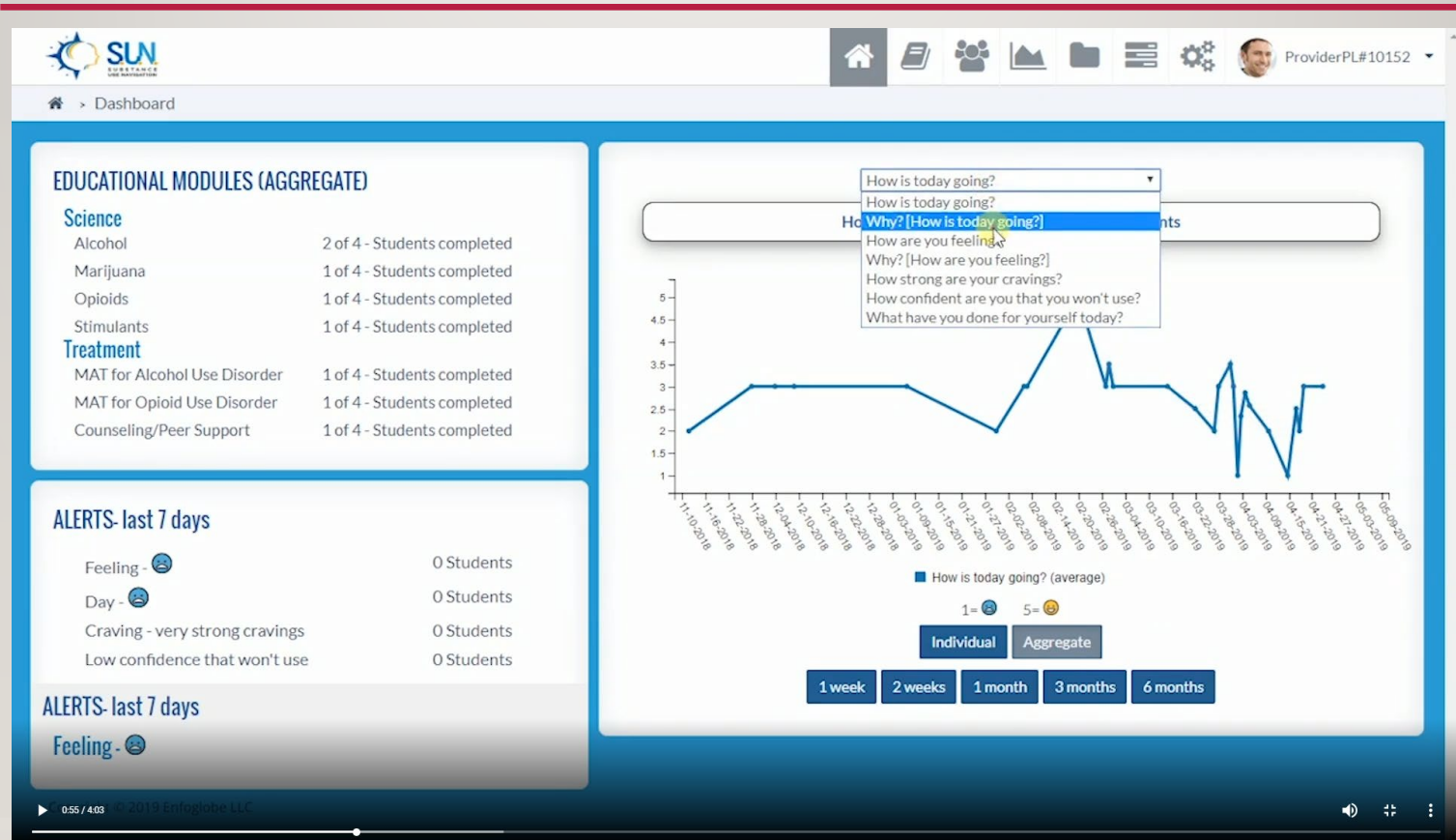
4) Validated new questions using online pilot survey of IU students (compared original validated questions to modified questions, factoral analysis, open-ended feedback requested)

UPDATING MOBILE APP DAILY QUESTIONS

SYSTEM COMPONENT 3: PROVIDER PORTAL

16 NEW SCALE DEVELOPMENT

See methodological appendix

LESSONS LEARNED: PROVIDER PORTAL DESIGN/DEVELOPMENT

No free-writing (i.e. only ordinal or MC)

Integration w/ medical record

42 CFR Part 2 & HIPAA relevant (& misunderstood) → provider-provider sharing

Liability concern & alerts

Invite student; not the other way around

More interested in individual level data

ADDITIONAL LESSONS

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- Fitting everything on a mobile app screen → videos in portal only
- Lengthy university security review
- Need simple but secure registration & sign-in
- In person training preferred but difficult to coordinate
- Need strong leadership voice at clinic
- Include end users in development (customize)

19 NEXT STEPS

✓ Complete IU Feasibility Study (see previous aims)

Future: RCT at 2+ universities

www.exploresun.com