

Association for Information Systems  
**AIS Electronic Library (AISeL)**

---

AMCIS 2020 TREOs

TREO Papers

---

8-10-2020

## Barriers and Facilitators to PDMP IS Success in the US

Heather Martin

*University of Alabama, Birmingham (SSO), martinhd@uab.edu*

Shikha Modi

*University of Alabama, Birmingham (SSO), shikha@uab.edu*

Sue Feldman

*University of Alabama, Birmingham (SSO), sfeldman@uab.edu*

Follow this and additional works at: [https://aisel.aisnet.org/treos\\_amcis2020](https://aisel.aisnet.org/treos_amcis2020)

---

### Recommended Citation

Martin, Heather; Modi, Shikha; and Feldman, Sue, "Barriers and Facilitators to PDMP IS Success in the US" (2020). *AMCIS 2020 TREOs*. 51.

[https://aisel.aisnet.org/treos\\_amcis2020/51](https://aisel.aisnet.org/treos_amcis2020/51)

This material is brought to you by the TREO Papers at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2020 TREOs by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Barriers and Facilitators to PDMP IS Success in the US

TREO Talk Paper

**Heather Duran Martin**

The University of Alabama at Birmingham  
martinhd@uab.edu

**Shikha S Modi**

The University of Alabama at Birmingham  
shikha@uab.edu

**Sue S Feldman**

The University of Alabama at Birmingham  
sfeldman@uab.edu

## Abstract

**Background:** Approximately 118 thousand global deaths associated with opioid use disorder occurred in 2016, and an increasing proportion of those deaths is due to prescription opioids.[1] The United States (US) had the highest narcotic drug consumption in the world in 2014, according to the International Narcotics Control Board.[2] “Prescription Drug Monitoring Programs (PDMPs) collect, monitor and analyze electronically transmitted prescribing and dispensing data submitted by pharmacies and dispensing practitioners” to reduce prescription drug abuse and diversion.[3] Although PDMPs help battle prescription drug abuse and diversion, PDMPs face many challenges that hinder their success.[4, 5] **Objective:** To search the literature to determine if there are any common barriers and facilitators to PDMP Information System (IS) success in the United States. **Model:** The Delone and McLean IS Success Model was used to categorize barriers and facilitators to PDMP IS success. **Methods:** Scopus, PubMed and Embase databases were searched due to their relevance to information technology, education and research. The PRISMA framework guided the search process. **Key Findings:** There were 151 and 182 barriers and facilitators to PDMP IS success found in 55 peer reviewed articles, respectively. Some barrier themes reported were PDMP data not being available from other states, PDMP data being delayed, the PDMP being too time consuming, not being able to delegate PDMP access, lack of knowledge or awareness of the PDMP, and the PDMP being difficult to use due to not being integrated with the EHR. Some facilitator themes reported were increasing PDMP interoperability between state lines, making PDMP data more timely or available in “real-time”, integrating PDMP data with EHR data, and delegating PDMP access. **Conclusion:** Practice should use these findings to assess current barriers to PDMP success in the US and should draw possible solutions from the list of facilitators. Some facilitators contradict others. PDMP users and administrators should consider the context of their organization and state when determining which facilitators would most promote PDMP IS success. Combining facilitators may be the best route to PDMP IS success in specific situations.

## References

1. Organization, W.H. Management of Substance Abuse. 2019, pp. Information sheet on opioid overdose.
2. Board, I.N.C. Narcotic drugs: estimated world requirements for 2016; statistics for 2014 2016.
3. TTAC, P. Prescription Drug Monitoring Frequently Asked Questions. 2018.
4. Norwood, C.W., and Wright, E.R. Promoting consistent use of prescription drug monitoring programs (PDMP) in outpatient pharmacies: Removing administrative barriers and increasing awareness of Rx drug abuse. *Research in Social and Administrative Pharmacy*, 12, 3 (2016), 509-514.
5. Christianson, H., Driscoll, E., and Hull, A. Alaska nurse practitioners' barriers to use of prescription drug monitoring programs. *J Am Assoc Nurse Pract*, 30, 1 (2018), 35-42.