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IMPROVING COMMUNITY HEALTH THROUGH
POLICY RESEARCH

KEY FINDINGS AND RECOMMENDATIONS FROM THE 2013 IPLA INSPECT KNOWLEDGE AND USE SURVEY

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BACKGROUND

The misuse and abuse of controlled prescription medication is a significant and growing problem in the United States. The National Survey on Drug Use and Health (NSDUH) estimates that in 2012, 20.9 percent of the United States' population 12 years of age or older had used prescription-type psychotherapeutics illicitly during their lifetime while 2.6 percent had done so in the past 30 days (Substance Abuse and Mental Health Services Administration, 2013). Opioid pain relievers are the most commonly abused type of controlled prescription medication followed by central nervous system depressants, and central nervous system stimulants (Indiana General Assembly, 2013). Data suggest that the rate of controlled prescription medication abuse is being driven by the high rates at which these medications are currently being prescribed (Compton & Volkow, 2006; Fortuna, Robbins, Caiola, Joynt, & Halterman, 2010; Kuehn, 2007; Manchikanti & Singh, 2008; Maxwell, 2011).

One potential approach to curtailing the abuse of controlled prescription medication is through the implementation of prescription drug monitoring programs (PDMPs) (Manchikanti, Whitfield, & Pallone, 2005; Wang & Christo, 2009). A PDMP is a statewide electronic database which collects designated data on substances dispensed in the state. A PDMP is housed by a specified statewide regulatory, administrative or law enforcement agency. The housing agency distributes data from the database to individuals who are authorized under state law to receive the information for purposes of

their profession (National Alliance for Model State Drug Laws, 2011).

Established in its present form in 2004, the Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT) is Indiana's PDMP. The Indiana Professional Licensing Agency (IPLA; <http://www.in.gov/pla/>) and the Indiana Board of Pharmacy designed INSPECT to serve as a tool to address the problem of prescription drug abuse and diversion in Indiana. INSPECT collects and retains in its database every controlled substance dispensed on an outpatient basis by all licensed pharmacies in the state. INSPECT performs two critical functions: it maintains a warehouse of patient information for health care professionals and it provides an important investigative tool for law enforcement. Only registered licensed providers who dispense and/or prescribe medication have on-going access to INSPECT. At the time the IPLA INSPECT Knowledge and Use Survey was completed, Indiana law did not require medical providers or pharmacists to review INSPECT prior to prescribing or dispensing controlled substances; however, IPLA encouraged such reviews. As of December 15, 2013, medical providers treating chronic non-terminal pain patients with opioids are required to check INSPECT at a patient's initial visit and then at least annually (Indiana General Assembly, 2013). Access to INSPECT can be granted to law enforcement if there is an active investigation involving prescription drug misuse/abuse and the agent is registered with IPLA.

SURVEY DEVELOPMENT

The development of the IPLA INSPECT Knowledge and Use Survey was a collaborative effort between representatives from IPLA, the State Prescription Drug Abuse Prevention Task Force Education Committee, and the Indiana University Purdue University – Indianapolis (IUPUI) Center

for Health Policy (CHP). The web-based survey was designed to gather information on prescribers' and dispensers' knowledge, use, and opinions of INSPECT as well as to assess prescribers' and dispensers' attitudes and beliefs about prescribing and dispensing opioids.

SURVEY DISTRIBUTION AND RESPONSE RATE

In order to participate in the survey, potential respondents had to hold a valid license to prescribe and/or dispense controlled substances in Indiana and not be Doctors of Veterinary Medicine. The IPLA identified 38,333 individuals licensed as Medical Doctors (MDs), Doctors of Osteopathy (DOs), Doctors of Podiatric Medicine (DPMs), Physician Assistants (PAs), Nurse Practitioners (NPs), Dentists, or Pharmacists who held valid controlled substance prescribing and/or dispensing privileges in Indiana. At the request of the CHP,

IPLA sent an initial electronic invitation and three follow-up reminders to complete the INSPECT survey to all 38,333 eligible practitioners. Data collection began on October 15, 2013 and ended on November 30, 2013. Of the 38,333 eligible practitioners, a total of 5,994 finished the survey yielding an overall response rate of 15.6%. NPs, Dentists, and PAs responded at rates that were slightly higher than the remaining license types (see Table 1).



Table 1. IPLA INSPECT Survey Response Rate

Licensure Type	Number Invited	Number who Completed Survey	Response Rate
Medical Doctor (MD)	17,395	2,204	12.7%
Doctor of Osteopathy (OD)	1,395	191	13.7%
Doctor of Podiatric Medicine (DPM)	347	49	14.1%
Physician Assistant (PA)	905	181	20.0%
Nurse Practitioner (NP)	3,822	886	23.2%
Dentist (DDS or DMD)	3,717	753	20.3%
Pharmacist (Pharm D or Pharm BS)	10,606	1,582	14.9%
Other/Missing	--	148	--
Total	38,333	5,994	15.6%

SURVEY RESULTS

The IPLA INSPECT Knowledge and Use Survey covered the following topics: practice characteristics; demographics; knowledge and use of INSPECT; barriers related to use of INSPECT; administration and use of INSPECT's data; impact of INSPECT on prescribing and dispensing behavior; views on prescription drug abuse; management of patients with chronic, non-terminal pain; knowledge of the risks and benefits of using opioids for the treatment of chronic, non-terminal pain; and additional comments and suggestions. The survey questions each respondent was eligible to answer varied based on their responses to a set of screening questions so that not all respondents answered all questions.

Although 5,994 individuals finished the survey, many respondents chose not to answer all the survey questions they were eligible to answer, resulting in varying amounts of missing data. The tables in the report will present the total population of individuals who were eligible to answer a given question, the total number of individuals who were eligible to answer a given question but did not, and then the percentages based on the actual individuals who did complete the question. The percentages cited in the text also refer to the population of respondents who completed a given question. Throughout this report, we focus the readers' attention on patterns in the data that are statistically significant at the $p < .05$ level or better.

Practice Characteristics

The first section of the survey asked respondents to provide information regarding both their professional and demographic background and their professional practice. Respondents were asked to provide their license information and the majority of respondents who did so described themselves as being licensed MDs (37.4%) or licensed Pharmacists (26.9%). The remaining respondents said they held licenses as NPs (15.0%), Dentists (12.8%), DOs (3.2%), PAs (3.1%), DPMs (0.8%), or held some other license (0.7%). The survey asked MDs, DOs,

PAs, and NPs to provide their medical specialty. The majority of respondents in these professions stated they practiced either Family Medicine (37.4%) or Internal Medicine (14.9%).

All respondents were asked to describe the type of setting where they saw the majority of their patients. Of survey participants who chose to respond, most said they worked in an outpatient clinic (37.7%), a pharmacy (15.0%), an inpatient hospital (14.3%) or in some other setting such as in academic research, a university health clinic, a mental health center, a correctional facility, a dental clinic, in a nursing home, or were retired or and no longer practicing (12.1%; see Table 2).

Survey participants, other than Pharmacists, were asked to specify whether they worked primarily with adults, children, or both. Respondents who chose to answer typically said they worked with adults (42.7%) or with adults and children (49.1%).

When asked to indicate whether they served patients living in states other than Indiana, 49.7% of respondents who completed the question said they did, 45.8% of respondents said they did not, and 4.5% of respondents were unsure whether or not they served patients living in other states.

Respondents reported having been practicing in their primary field for 18.9 years on average (SD = 12.9; see Table 2). Although all individuals who participated in the survey held a valid license to prescribe or dispense controlled substances, the survey did not ask participants to indicate whether they were actively practicing within their profession.

Demographic Characteristics

In terms of gender, 52.1% of survey participants reported being male and 44.3% of participants reported being female. Racially, most respondents said they were Caucasian (88.5%) with the remaining respondents stating they were Asian (4.9%), of another race (3.0%), African-American (2.3%), or Latino (1.2%). The average age of respondents was 50.4 years (SD = 12.8; see Table 2).



Table 2. Practice and Demographic Characteristics of Sample

Practice Indicators	N	%
License Type		
Number Eligible	5,994	
Eligible Did not Respond	106	
Total Number of Responses	5,888	
Medical Doctor	2,204	(37.4)
Doctor of Osteopathy	191	(3.2)
Doctor of Podiatric Medicine	49	(0.8)
Physician Assistant	181	(3.1)
Nurse Practitioner	886	(15.0)
Dentist	753	(12.8)
Pharmacist	1,582	(26.9)
Other	42	(0.7)
Primary Practice Type		
Number Eligible	4,306	
Eligible Did not Respond	143	
Total Number of Responses	4,163	
Adult	1,779	(42.7)
Pediatric	338	(8.1)
Both	2,046	(49.1)
Primary Practice Setting		
Number Eligible	5,994	
Eligible But No Response	227	
Total Number of Responses	5,767	
Community Health Center/Public Health Clinic	392	(6.8)
Diagnostic Testing Facility	13	(0.2)
Emergency Room	334	(5.8)
Hospital (Inpatient)	826	(14.3)
Long Term Acute Care Hospital	42	(0.7)
Outpatient Clinic (Private Practice or Academic)	2,175	(37.7)
Outpatient Surgery Center	40	(0.7)
Pain Management Clinic	49	(0.8)
Pharmacy (Inpatient)	105	(1.8)
Pharmacy (Outpatient)	866	(15.0)
Rehabilitation Hospital	5	(0.1)
Retail Medicine Clinic	94	(1.6)
Substance Abuse Treatment Facility (Inpatient)	2	(0.0)
Urgent Care Facility	124	(2.2)
Other	700	(12.1)



Table 2 Cont. Practice and Demographic Characteristics of Sample

		N	(%)
Prescribed controlled substances in past 12 mos.			
	Number Eligible	4,306	
	Eligible But No Response	9	
	Total Number of Responses	4,297	
Yes		3,783	(88.0)
No		514	(12.0)
Dispensed controlled substances in past 12 mos.			
	Number Eligible	5,994	
	Eligible But No Response	179	
	Total Number of Responses	5,815	
Yes		2,145	(36.9)
No		3,670	(63.1)
Years in Practice			
		M	(SD)
	Number Eligible	5,994	
	Eligible But No Response	164	
	Total Number of Responses	5,830	
5 years or less		1154	(19.8)
6-10 years		785	(13.5)
11-19 years		1184	(20.3)
20-29 years		1278	(21.9)
30-39 years		1018	(17.5)
40 years or more		411	(7.0)
		M	(SD)
		18.9	(12.9)
Demographic Indicators			
		N	(%)
Gender			
	Number Eligible	5,994	
	Eligible But No Response	218	
	Total Number of Responses	5,776	
Male		3,121	(52.1)
Female		2,655	(44.3)
Race			
	Number Eligible	5,994	
	Eligible But No Response	248	
	Total Number of Responses	5,746	
Asian		281	(4.9)
African-American		135	(2.3)
Caucasian		5,088	(88.5)
Latino		67	(1.2)
Other Race		175	(3.0)
Age			
	Number Eligible	5,994	
	Eligible But No Response	279	
	Total Number of Responses	5,715	
35 years or less		903	(15.8)
36-45		1186	(20.8)
46-55		1464	(25.6)
56 years or older		2162	(37.8)
		M	(SD)
		50.4	(12.8)



Characteristics of Controlled Substance Prescribers and Dispensers

To aid in targeting questions specifically to participants who dealt with controlled substances, the survey had participants who held licenses which allowed them to prescribe medication (e.g., MDs, DOs, NPs, etc.; n = 4,412) indicate whether they prescribed any controlled substances in the past 12 months. Eighty-eight percent (88.0%) of individuals with prescribing authority said they had prescribed controlled substances in the past 12 months. The survey similarly asked all respondents (N = 5,994) whether they had dispensed controlled medication in the past 12 months. A total of 36.9% of participants reported dispensing controlled substance medication in the past 12 months (see Table 2). Table 2a provides a breakdown of the demographic characteristics of respondents who said they only prescribed controlled substance

medications (n = 3,032), only dispensed controlled substance medications (n = 1,414) and who prescribed and dispensed controlled substance medications (n = 731). A total of 474 respondents stated that they had neither prescribed nor dispensed controlled substance medication in the past 12 months while the remaining 343 survey participants failed to provide sufficient data to determine their prescribing and/or dispensing patterns. Respondents who prescribed controlled substances or who prescribed and dispensed controlled substances were more likely to be MDs, NPs, and Dentists, were more likely to be male, and more likely to be older. Survey participants who only dispensed controlled substances were largely pharmacists (97.0%), were more often female (53.1%), and were somewhat younger than participants who had prescription privileges (see Table 2a).



Table 2a. Demographic Characteristics of Respondents by Controlled Substance Prescribing and Dispensing Patterns

	Prescribers		Dispensers		Prescribers and Dispensers		Did not Prescribe or Dispense		χ^2	P
	N	(%)	N	(%)	N	(%)	N	(%)		
Licensure									5516.6	<.001
Medical Doctor	1458	(48.1)	25	(1.8)	385	(52.7)	288	(60.8)		
Doctor of Osteopathy	125	(4.1)	3	(0.2)	52	(7.1)	11	(2.3)		
Doctor of Podiatric Medicine	43	(1.4)	0	(0.0)	1	(0.1)	4	(0.8)		
Physician Assistant	118	(3.9)	0	(0.0)	45	(6.2)	13	(2.7)		
Nurse Practitioner	663	(21.9)	1	(0.1)	128	(17.5)	83	(17.5)		
Dentist	566	(18.7)	2	(0.1)	107	(14.6)	60	(12.7)		
Pharmacist	0	(0.0)	1371	(97.0)	0	(0.0)	0	(0.0)		
Other	29	(1.0)	1	(0.1)	4	(0.5)	4	(0.8)		
Not provided	30	(1.0)	11	(0.8)	9	(1.2)	11	(2.3)		
Practice Type									61.7	<.001
Adult	1246	(41.1)	9	(0.6)	278	(38.0)	223	(47.0)		
Pediatric	228	(7.5)	1	(0.1)	46	(6.3)	61	(12.0)		
Both	1458	(48.1)	30	(2.1)	380	(52.0)	153	(32.3)		
Not Applicable - Pharmacists	0	(0.0)	1371	(97.0)	0	(0.0)	0	(0.0)		
Not provided	100	(3.3)	3	(0.2)	27	(3.7)	37	(7.8)		
Gender									62.2	<.001
Male	1636	(54.0)	622	(44.0)	423	(57.9)	275	(58.0)		
Female	1315	(43.4)	751	(53.1)	285	(39.0)	177	(37.3)		
Not provided	81	(2.7)	41	(2.9)	23	(3.1)	22	(4.6)		
Race									54.0	<.001
Asian	151	(5.0)	46	(3.3)	50	(6.8)	28	(5.9)		
African-American	67	(2.2)	23	(1.6)	28	(3.8)	10	(2.1)		
Caucasian	2595	(85.6)	1257	(88.9)	591	(80.8)	382	(80.6)		
Latino	33	(1.1)	8	(0.6)	9	(1.2)	14	(3.0)		
Other Race	98	(3.2)	28	(2.0)	23	(3.1)	12	(2.5)		
Not provided	88	(2.9)	52	(3.7)	30	(4.1)	28	(5.9)		
Age									289.0	<.001
35 years or less	357	(11.8)	372	(26.3)	96	(13.1)	34	(7.2)		
36-45	617	(20.3)	293	(20.7)	171	(23.4)	48	(10.1)		
45-55	812	(26.8)	292	(20.7)	200	(27.4)	100	(21.1)		
56 years or older	1133	(37.4)	401	(28.4)	233	(31.9)	265	(55.9)		
Not provided	113	(3.7)	56	(4.0)	31	(4.2)	27	(5.7)		
Years in Practice									176.3	<.001
5 years or less	595	(19.6)	278	(19.6)	187	(25.6)	66	(13.9)		
6-10 years	431	(14.2)	181	(12.8)	97	(13.3)	49	(10.3)		
11-19 years	686	(22.6)	223	(15.8)	167	(22.8)	76	(16.0)		
20-29 years	697	(23.0)	300	(21.2)	141	(19.3)	104	(21.9)		
30-39 years	480	(15.8)	287	(20.3)	93	(12.7)	103	(21.7)		
40 years or more	138	(4.6)	143	(10.1)	31	(4.2)	70	(14.8)		
Not provided	5	(0.2)	2	(0.1)	2	(0.3)	6	(1.3)		

Note: Pharmacists were not asked to describe their practice type.



Knowledge and Use of INSPECT

The survey asked respondents several questions related to their knowledge and use of INSPECT. First, the survey had all respondents indicate whether they had ever heard of INSPECT. From the participants who chose to respond (n = 5,860), 85.0% or 4,981 participants said they had heard of INSPECT prior to receiving the survey. Table 3 describes the percentage of respondents who reported knowing about INSPECT by their license type where available. Pharmacists, PAs, and NPs were significantly more likely than individuals with the remaining license types to report having

heard of INSPECT (see Table 3). When compared to respondents who had heard of INSPECT, respondents who had not heard of INSPECT were more likely to have an exclusively adult (41.3%) or pediatric (13.3%) practice, were less likely to be pharmacists (10.0%), were more likely to report not prescribing (23.0%) or dispensing (74.7%) controlled substances in the past 12 months, were more likely to be male (66.0%), were less likely to be white (79.7%), were more likely to be 56 years of age or older (50.2%), and more likely to have been in practice for 20 years or more (56.0%; see Table 3a).

Table 3. Awareness of INSPECT by License Type

	Had heard of INSPECT		Had not heard of INSPECT	
	N*	(%)	N*	(%)
Medical Doctor	1,660	(76.9)	498	(23.1)
Doctor of Osteopathy	151	(80.3)	37	(19.7)
Doctor of Podiatric Medicine	35	(72.9)	13	(27.1)
Physician Assistant	167	(93.3)	12	(6.7)
Nurse Practitioner	810	(92.4)	67	(7.6)
Dentist	598	(80.7)	143	(19.3)
Pharmacist	1,469	(94.3)	88	(5.7)
Other	34	(85.0)	6	(14.9)

$\chi^2 = 284.633, p < .000$

*N will not total 5860 due to missing data



Table 3a. Characteristics of Respondents Who Had and Had Not Heard of INSPECT

	Had heard of INSPECT		Had not heard of INSPECT		\bar{x}	p
	N	(%)	N	(%)		
Primary Practice Type						
Adult	1382	(27.7)	363	(41.3)	7.6	<.001
Pediatric	215	(4.3)	117	(13.3)	7.6	<.001
Both	1751	(35.2)	263	(29.9)	3.1	.002
Not Applicable - Pharmacists	1469	(29.5)	88	(10.0)	16.2	<.001
Not provided	164	(3.3)	48	(5.5)		
Prescribed Controlled Substances in the Past 12 Mos.						
Yes	3148	(63.2)	571	(65.0)	1.0	0.152
No	300	(6.0)	202	(23.0)	11.6	<.001
Not applicable - Pharmacists	1469	(29.5)	88	(10.0)	16.2	<.001
Missing	64	(1.3)	18	(2.0)		
Dispensed Controlled Substances in the Past 12 Mos.						
Yes	1910	(38.3)	201	(22.9)	9.8	<.001
No	2951	(59.2)	657	(74.7)	9.5	<.001
Missing	120	(2.4)	21	(2.4)		
Practice Location						
Metro area 1 million or more	2151	(43.2)	293	(33.3)	5.7	<.001
Metro area 250,000-1 million	736	(14.8)	122	(13.9)	0.7	0.240
Metro area fewer than 250,000	990	(19.9)	169	(19.2)	0.5	0.628
Non-metro 20,000+ adjacent to metro area	179	(3.6)	18	(2.0)	10.6	<.001
Non-metro 20,000+ not adjacent to metro area	125	(2.5)	11	(1.3)	9.3	<.001
Non-metro 2,500-19,999 adjacent to metro area	475	(9.5)	64	(7.3)	2.3	0.024
Non-metro 2,500-19,999 not adjacent to metro area or completely rural	71	(1.4)	7	(0.8)	1.8	0.081
Practice location not specified	254	(5.1)	195	(22.2)		
Gender						
Male	2501	(50.2)	580	(66.0)	9.0	<.001
Female	2354	(47.3)	272	(30.9)	9.6	<.001
Not provided	126	(2.5)	27	(3.1)		
Race						
Asian	203	(4.1)	76	(8.6)	4.6	<.001
African-American	102	(2.0)	32	(3.6)	2.4	0.015
Caucasian	4327	(86.9)	701	(79.7)	7.2	<.001
Latino	50	(1.0)	16	(1.8)	1.7	0.089
Other Race	144	(2.9)	26	(3.0)	0.2	0.873
Not provided	155	(3.1)	28	(3.2)		
Age						
<35 years	840	(16.9)	58	(6.6)	10.4	<.001
36-45	1044	(21.0)	131	(14.9)	4.6	<.001
45-55	1231	(24.7)	209	(23.8)	0.6	0.564
56 and older	1691	(33.9)	441	(50.2)	9.0	<.001
Not provided	175	(3.5)	40	(4.6)		
Years in Practice						
5 years or less	1039	(20.9)	104	(11.8)	7.4	<.001
6-10 years	676	(13.6)	101	(11.5)	1.8	0.075
11-19 years	995	(20.0)	163	(18.5)	1.1	0.293
20-29 years	1055	(21.2)	201	(22.9)	1.1	0.267
30-39 years	806	(16.2)	189	(21.5)	3.6	<.001
40 years or more	303	(6.1)	102	(11.6)	4.9	<.001
Not provided	107	(2.1)	19	(2.2)		



Second, the survey asked those participants who had heard of INSPECT (n = 4,981) to state whether or not they used it. Of the respondents who had heard of INSPECT, 70.7% or 3,450 respondents said they had used INSPECT. Table 4 displays the percentage of respondents who reported using and not using INSPECT by their license type. DOs were significantly more likely to have reported using INSPECT while Dentists and DPMs were significantly less likely to have reported using it when compared to respondents with the remaining

license types (see Table 4). When compared to respondents who used INSPECT, respondents who did not use INSPECT were more likely to report having a pediatric practice (9.5%), were likely to report not having prescribed (14.5%) or dispensed (64.3%) controlled substance medication, were more likely to be male (55.3%), were more likely to be older (42.0% were 56 years of age or older), and were more likely to have been practicing in their field for a longer period of time (30.7% had been practicing for 30 years or more; see table 4a).

Table 4. Use of INSPECT by Type of License

	Had used INSPECT		Had not used INSPECT	
	N*	(%)	N*	(%)
Medical Doctor	1,148	(71.0)	469	(29.0)
Doctor of Osteopathy	132	(89.2)	16	(10.8)
Doctor of Podiatric Medicine	17	(51.5)	16	(48.5)
Physician Assistant	134	(80.7)	32	(19.3)
Nurse Practitioner	623	(78.3)	173	(21.7)
Dentist	292	(50.4)	287	(49.6)
Pharmacist	1,043	(71.8)	410	(28.2)
Other	24	(72.7)	9	(27.3)

$\chi^2 = 176.236, p < .001$

*N will not total to 4981 due to missing data



Table 4a. Characteristics of INSPECT Users and Non-Users

	Had used INSPECT		Had not used INSPECT		χ	p
	N	(%)	N	(%)		
Primary Practice Type						
Adult	929	(26.9)	412	(28.8)	1.3	0.180
Pediatric	78	(2.3)	136	(9.5)	8.8	<.001
Both	1307	(37.9)	408	(28.5)	6.5	<.001
Not Applicable - Pharmacists	1043	(30.2)	410	(28.7)	1.0	0.294
Not provided	93	(2.7)	64	(4.5)		
Prescribed Controlled Substances in the Past 12 Mos.						
Yes	2288	(66.3)	790	(55.2)	7.2	<.001
No	83	(2.4)	207	(14.5)	12.5	<.001
Not applicable - Pharmacists	1043	(30.2)	410	(28.7)	1.0	0.294
Not provided	36	(1.0)	23	(1.6)		
Dispensed Controlled Substances in the Past 12 Mos.						
Yes	1410	(40.9)	472	(33.0)	5.3	<.001
No	1964	(56.9)	919	(64.3)	4.9	<.001
Not provided	76	(2.2)	39	(2.7)		
Practice Location						
Metro area 1 million or more	1504	(43.6)	613	(42.9)	0.4	0.653
Metro area 250,000-1 million	486	(14.1)	234	(16.4)	2.0	0.044
Metro area fewer than 250,000	715	(20.7)	249	(17.4)	2.7	0.007
Non-metro 20,000+ adjacent to metro area	138	(4.0)	38	(2.7)	2.4	0.017
Non-metro 20,000+ not adjacent to metro area	98	(2.8)	27	(1.9)	2.0	0.049
Non-metro 2,500-19,999 adjacent to metro area	354	(10.3)	105	(7.3)	3.5	0.001
Non-metro 2,500-19,999 not adjacent to metro area or completely rural	56	(1.6)	13	(0.9)	2.1	0.033
Practice location not specified	99	(2.9)	151	(10.6)		
Gender						
Male	1650	(47.8)	791	(55.3)	4.8	<.001
Female	1712	(49.6)	605	(42.3)	4.7	<.001
Not provided	88	(2.6)	34	(2.4)		
Race						
Asian	134	(3.9)	65	(4.5)	1.0	0.348
African-American	71	(2.1)	30	(2.1)	0.0	1.000
Caucasian	3002	(87.0)	1239	(86.6)	0.4	0.708
Latino	38	(1.1)	12	(0.8)	1.0	0.309
Other Race	103	(3.0)	37	(2.6)	0.8	0.434
Not provided	102	(3.0)	47	(3.3)		
Age						
<35 years	641	(18.6)	195	(13.6)	4.5	<.001
36-45	794	(23.0)	234	(16.4)	5.4	<.001
45-55	863	(25.0)	349	(24.4)	0.7	0.459
56 and older	1035	(30.0)	601	(42.0)	7.9	<.001
Not provided	117	(3.4)	51	(3.6)		
Years in Practice						
5 years or less	807	(23.4)	224	(15.7)	6.4	<.001
6-10 years	518	(15.0)	151	(10.6)	4.3	<.001
11-19 years	718	(20.8)	258	(18.0)	2.3	0.023
20-29 years	707	(20.5)	322	(22.5)	1.5	0.124
30-39 years	468	(13.6)	318	(22.2)	6.9	<.001
40 years or more	166	(4.8)	122	(8.5)	4.5	<.001
Not provided	66	(1.9)	35	(2.4)		



Next, the survey asked the respondents who had used INSPECT (n = 3,450) to report how long it had been since their last visit to INSPECT. The largest percentage of INSPECT users (34.4%) said they had last visited INSPECT within the past week but not on the specific day they completed the survey (see Table 5).

Fourth, the survey asked respondents specifically about how often they checked INSPECT for their patients who were on controlled substances. Over three quarters of INSPECT users (77.4%) said they checked INSPECT on a periodic basis for their patients on controlled substances with the remaining INSPECT users saying they checked INSPECT at every visit (8.6%), at some other interval (10.2%), or that they never checked INSPECT for patients on controlled substances (3.8%; see Table 5). Respondents who said they checked INSPECT periodically for patients on controlled substances were typically MDs (33.5%) or pharmacists (30.5%). The largest percentage of periodic visitors to

INSPECT reported having last visited INSPECT in the past week, but not on the day they completed the survey (36.7%; see table 5a).

The survey subsequently asked respondents who used INSPECT (n = 3,450) to indicate what best described their primary reason for checking INSPECT. Most respondents stated that the main reason they had for checking INSPECT was to review a patient's prescriptions (89.0%). The survey also asked participants about several other common reasons they may have had to check INSPECT. Most survey participants who used INSPECT cited checking INSPECT for patients who they thought may be drug seeking (90.9%), for monitoring patients on controlled substances (61.4%), and for new patients prior to prescribing and/or dispensing a controlled substance (59.0%). Table 5 describes the primary reason for which respondents stated that they used INSPECT as well as the other reasons respondents endorsed for accessing INSPECT.



Table 5. Frequency of and Reasons for Checking INSPECT

	N	(%)
When was the last time you visited INSPECT?		
Number Eligible	3,450	
Eligible But No Response	54	
Total Number of Responses	3,396	
Today	431	(12.7)
In the past week, but not today	1,168	(34.4)
In the past month, but not in the past week	698	(20.6)
More than a month ago	930	(27.4)
Other	169	(5.0)
How often do you check INSPECT for patients on controlled substances?		
Number Eligible	3,450	
Eligible But No Response	61	
Total Number of Responses	3,389	
At every visit	291	(8.6)
Periodically	2,622	(77.4)
Never	130	(3.8)
Other	346	(10.2)
Primary Reason for Checking INSPECT		
Number Eligible	3,450	
Eligible But No Response	114	
Total Number of Responses	3,336	
Review a patient's prescriptions	2,969	(89.0)
Review your prescription practices	45	(1.3)
Ensure the accuracy of submitted data	96	(2.9)
To submit controlled substance data	106	(3.2)
Other primary reason	120	(3.6)
Other Reasons for Checking INSPECT		
Number Eligible	3,450	
Eligible But No Response	58	
Total Number of Responses	3,392	
For new patients prior to prescribing and/or dispensing a controlled substance.	2,000	(59.0)
For established patients prior to prescribing and/or dispensing a new controlled substance.	1,470	(43.3)
For patients you think may be drug seeking.	3,084	(90.9)
To review your prescribing and/or dispensing practices.	459	(13.5)
To ensure the accuracy of submitted data.	392	(11.6)
To monitor patients on controlled substances.	2,083	(61.4)
For other reasons	158	(4.7)



Table 5a. INSPECT Users who Check INSPECT Periodically (n = 2,622)

	N	(%)
License Type		
Medical Doctor	879	(33.5)
Doctor of Osteopathy	110	(4.2)
Doctor of Podiatric Medicine	16	(0.6)
Physician Assistant	113	(4.3)
Nurse Practitioner	446	(17.0)
Dentist	215	(8.2)
Pharmacist	799	(30.5)
Other	16	(0.6)
Not provided	28	(1.1)
Last Time Visited INSPECT		
Today	283	(10.8)
In the past week, but not today	962	(36.7)
In the past month, but not in the past week	620	(23.6)
More than a month ago	690	(26.3)
Other	63	(2.4)
Not provided	4	(0.2)

Use of INSPECT by Controlled Substance Prescribers

The next set of questions targeted the 2,288 users of INSPECT who said they had prescribed controlled substances in the past 12 months. The survey asked these respondents for what percentage of their patients on controlled substances had they checked INSPECT in the past 30 days and in the past 12 months. In terms of 30-day use, most INSPECT user-prescribers reported not checking INSPECT for any patients (20.0%), checking INSPECT for 1-10% of their patients (28.2%) or checking INSPECT for 11-20% of their patients (11.6%). Regarding their use of INSPECT in the past 12 months, most controlled substance prescribers reviewed INSPECT for 1-10% of their patients (31.1%), reviewed INSPECT for 11-20% of their patients (12.7%) or reviewed INSPECT for 91-100% of their patients (13.0%; see Table 6). Tables 6a, 6b, and 6c break down INSPECT checking behavior for the past 30 days and the past 12 months by practice type. Most INSPECT user-prescribers in pediatric practice reported checking INSPECT for 10.0% or less of their patients on controlled substances at both 30 days (82.2%) and 12 months (69.8%). INSPECT user-prescribers who had an adult practice or who had a practice comprised of both adult and pediatric patients reported checking INSPECT for their patients on controlled substances at rates similar to the overall

sample of INSPECT user-prescribers (see Tables 6a, 6b, 6c).

Prescribers were then asked to consider the patients on whom they reviewed INSPECT in the past 12 months and indicate the percentage for whom the information from INSPECT altered their prescribing decision. When considering the patients on whom they reviewed INSPECT in the past 12 months, most respondents said that the information from INSPECT altered their prescribing decision for none of their patients (16.7%) for 1-10% of their patients (29.7%), or for 11-20% of their patients (11.7%; see Table 6d).

Prescribers of controlled substances who used INSPECT were also asked if they had consulted INSPECT the last time they had considered writing a prescription for a controlled substance. Just over three quarters (37.0%) of INSPECT-using prescribers stated that they had consulted it the last time they had considered writing a controlled substance prescription. The survey asked this small percentage of prescribers if the information they learned from INSPECT prompted them to change their treatment plan. Just over half of the prescribers who had checked INSPECT (51.1%) made a change to their treatment plan based on what they learned from INSPECT while the remaining prescribers reported making no change to their treatment plan (49.9%) based on what they had learned (see Table 6d).



Table 6. Use of INSPECT by Controlled Substance Prescribers

		N	(%)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 30 days?			
	Number Eligible	2,288	
	Eligible But No Response	56	
	Total Number of Responses	2,232	
0%		447	(20.0)
1-10%		630	(28.2)
11-20%		258	(11.6)
21-30%		179	(8.0)
31-40%		107	(4.8)
41-50%		73	(3.3)
51-60%		105	(4.7)
61-70%		62	(2.8)
71-80%		81	(3.6)
81-90%		78	(3.5)
91-100%		212	(9.5)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 12 months?			
	Number Eligible	2,288	
	Eligible But No Response	46	
	Total Number of Responses	2,242	
0%		159	(7.1)
1-10%		697	(31.1)
11-20%		285	(12.7)
21-30%		187	(8.3)
31-40%		118	(5.3)
41-50%		86	(3.8)
51-60%		103	(4.6)
61-70%		68	(3.0)
71-80%		130	(5.8)
81-90%		117	(5.2)
91-100%		292	(13.0)



Table 6a. Use of INSPECT by Controlled Substance Prescribers - Adult Practice

		N	(%)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 30 days?			
	Number Eligible	879	
	Eligible But No Response	26	
	Total Number of Responses	853	
0%		213	(25.0)
1-10%		242	(28.4)
11-20%		94	(11.0)
21-30%		55	(6.4)
31-40%		37	(4.3)
41-50%		23	(2.7)
51-60%		43	(5.0)
61-70%		25	(2.9)
71-80%		23	(2.7)
81-90%		23	(2.7)
91-100%		75	(8.8)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 12 months?			
	Number Eligible	879	
	Eligible But No Response	20	
	Total Number of Responses	859	
0%		70	(8.1)
1-10%		284	(33.1)
11-20%		99	(11.5)
21-30%		74	(8.6)
31-40%		47	(5.5)
41-50%		41	(4.8)
51-60%		33	(3.8)
61-70%		27	(3.1)
71-80%		35	(4.1)
81-90%		37	(4.3)
91-100%		112	(13.0)



Table 6b. Use of INSPECT by Controlled Substance Prescribers - Pediatric Practice

	N	(%)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 30 days?		
Number Eligible	74	
Eligible But No Response	1	
Total Number of Responses	73	
0%	33	(45.2)
1-10%	27	(37.0)
11-20%	1	(1.4)
21-30%	2	(2.7)
31-40%	2	(2.7)
41-50%	0	(0.0)
51-60%	2	(2.7)
61-70%	0	(0.0)
71-80%	1	(1.4)
81-90%	1	(1.4)
91-100%	4	(5.5)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 12 months?		
Number Eligible	74	
Eligible But No Response	1	
Total Number of Responses	73	
0%	19	(26.0)
1-10%	32	(43.8)
11-20%	6	(8.2)
21-30%	5	(6.8)
31-40%	3	(4.1)
41-50%	1	(1.4)
51-60%	2	(2.7)
61-70%	1	(1.4)
71-80%	1	(1.4)
81-90%	2	(2.7)
91-100%	1	(1.4)



Table 6c. Use of INSPECT by Controlled Substance Prescribers - Both Adult and Pediatric Practice

		N	(%)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 30 days?			
	Number Eligible	1267	
	Eligible But No Response	28	
	Total Number of Responses	1239	
0%		187	(15.1)
1-10%		342	(27.6)
11-20%		158	(12.8)
21-30%		114	(9.2)
31-40%		64	(5.2)
41-50%		48	(3.9)
51-60%		58	(4.7)
61-70%		35	(2.8)
71-80%		55	(4.4)
81-90%		54	(4.4)
91-100%		124	(10.0)
For what percent of patients to whom you have prescribed controlled substances did you review INSPECT information in the past 12 months?			
	Number Eligible	1267	
	Eligible But No Response	24	
	Total Number of Responses	1243	
0%		62	(5.0)
1-10%		365	(29.4)
11-20%		173	(13.9)
21-30%		101	(8.1)
31-40%		65	(5.2)
41-50%		44	(3.5)
51-60%		66	(5.3)
61-70%		36	(2.9)
71-80%		88	(7.1)
81-90%		75	(6.0)
91-100%		168	(13.5)



Table 6d. Use of Inspect by Controlled Substance Prescribers

	N	(%)
Consider the patients for whom you have reviewed INSPECT in the past 12 month period. For what percent of these cases did the information you obtained from INSPECT alter your prescribing decision?		
Number Eligible	2,288	
Eligible But No Response	66	
Total Number of Responses	2,222	
0%	372	(16.7)
1-10%	661	(29.7)
11-20%	261	(11.7)
21-30%	223	(10.0)
31-40%	120	(5.4)
41-50%	177	(8.0)
51-60%	131	(5.9)
61-70%	38	(1.7)
71-80%	84	(3.8)
81-90%	44	(2.0)
91-100%	111	(5.0)
The last time you considered writing a prescription for a controlled substance, did you consult INSPECT?		
Number Eligible	2,288	
Eligible But No Response	30	
Total Number of Responses	2,258	
Yes	836	(37.0)
No	1,422	(63.0)
Did the information you learned from INSPECT prompt you to change your treatment plan?		
Number Eligible	836	
Eligible But No Response	7	
Total Number of Responses	829	
Yes	415	(50.1)
No	414	(49.9)

Usefulness of INSPECT

The survey asked all participants who had heard of INSPECT (n = 4,981) to indicate whether they believed INSPECT was or was not useful for achieving four specific goals. Most respondents believed that INSPECT was useful for monitoring

prescription histories with regard to controlled substances (93.9%), for decreasing “doctor shopping” (80.7%), for decreasing the incidence of controlled prescription drug misuse (79.9%), and for decreasing the incidence of controlled prescription drug diversion (62.6%; see Table 7).

Table 7. Usefulness of INSPECT

Do you think INSPECT is a useful program for...	N	(%)
Number Eligible	4,981	
Eligible But No Response	157	
Total Number of Responses	4,824	
...monitoring prescription histories with regard to controlled substances?	4,529	(93.9)
...decreasing the incidence of ‘doctor shopping’?	3,891	(80.7)
...decreasing the incidence of controlled prescription drug misuse?	3,856	(79.9)
...decreasing the incidence of controlled prescription drug diversion?	3,021	(62.6)
...other reasons	156	(3.2)

Barriers to Using INSPECT

The survey asked the 1,430 respondents who stated they knew about INSPECT but did not use it to indicate their primary reason for not using it. The top two specific reasons endorsed by respondents for not using INSPECT were because they did not

think they could (21.2%) or because their practice only involved seeing inpatients (15.8%). Most participants who did not use INSPECT (52.2%) indicated they did not use it for a reason other than the ones listed (see Table 8).



Table 8. Primary Reason for not Using INSPECT

	N	(%)
Number Eligible	1,430	
Eligible But No Response	54	
Total Number of Responses	1,376	
I did not think I could use it.	292	(21.2)
Because of my license type.	37	(2.7)
Because I only see inpatients.	217	(15.8)
Because I am not convinced it is helpful.	112	(8.1)
Because of some other reason.	718	(52.2)
Breakdown of Other Reasons		
Number Eligible	718	
Eligible But No Response	3	
Total Number of Responses	715	
No need to check INSPECT/not relevant for practice	195	(27.3)
Respondent does not prescribe controlled substances	117	(16.4)
Difficulties signing up or registering for INSPECT	115	(16.1)
Respondent has out-of-state practice	90	(12.6)
INSPECT is too hard to use or not helpful	82	(11.5)
Don't know how to use INSPECT	47	(6.6)
Retired/Not currently practicing	31	(4.3)
INSPECT is checked by someone else in office	23	(3.2)
No access to INSPECT on site/Use not encouraged by employer	15	(2.1)

The survey asked all participants who had heard of INSPECT (n = 4,981), regardless of whether or not they had used it, to indicate if they had or had not encountered specific barriers preventing them from using INSPECT. Having insufficient time

was the most frequently cited barrier respondents experienced for using INSPECT. Table 9 describes the percentage of participants who experienced various barriers related to using INSPECT.

Table 9. Barriers for Using INSPECT

	N	(%)
Number Eligible	4,981	
Eligible But No Response	138	
Total Number of Responses	4,843	
There are no barriers to using INSPECT in my practice	1,878	(38.8)
Insufficient time	2,049	(42.3)
Lack of reimbursement for additional time to use the system	495	(10.2)
Lack of access to computer/internet	240	(5.0)
Currently not registered to use INSPECT	915	(18.9)
Afraid of legal ramifications	107	(2.2)
Other reason	581	(12.0)

Administration and Impact of INSPECT

The survey asked all respondents that had heard of INSPECT (n = 4,981) to describe their opinions on four issues related to the administration of the INSPECT database and its data. First, survey participants were asked to indicate whether they thought INSPECT should be linked to a national controlled medication database. The majority of participants who knew about INSPECT (90.7%) said that it should be.

Second, the survey asked participants whether they believed medical professionals ought to be

required to access INSPECT prior to writing a prescription for a controlled medication. Most respondents familiar with INSPECT (66.8%) were against such a requirement (see Table 10). Table XX provides a comparison of survey participants who were for and against requiring medical professionals to check INSPECT prior to writing a prescription for a controlled medication. Supporters of a requirement to check INSPECT prior to writing a controlled medication prescription were more likely to be pharmacists (54.4%), to be female (56.2%), to be younger (22.1% were 35 years or less), and to



have been practicing for fewer years (24.3% were practicing for 5 years or less). Respondents who did not support a requirement to check INSPECT prior to writing a controlled medication prescription were more likely to be MDs (39.4%) or dentists (15.8%), were more likely to be male (54.3%), and were more likely to be older (35.7% were 56 years or older).

Third, the survey had participants indicate if they believed criminal justice professionals such as the police or DEA should be allowed access to INSPECT data. In considering access to INSPECT for patient-related information, most participants (57.3%) stated that criminal justice professionals

should have access to this data, but only under certain circumstances such as identifying potential drug diversion for illicit purposes or during the investigation of an ongoing case involving controlled substances. In regards to criminal justice professionals accessing INSPECT to determine whether providers are potentially overprescribing controlled substances, the largest percentage of respondents (49.6%) believed access should only be given under certain circumstances such as when trying to identify potential “pill mills” or during the investigation of an ongoing case involving controlled substances (see Table 10).

Table 10. INSPECT Administration and Access

	N	(%)
Should INSPECT be linked to a national controlled medication database?		
Number Eligible	4,981	
Eligible But No Response	143	
Total Number of Responses	4,838	
Yes	4,386	(90.7)
No	452	(9.3)
Should medical professionals be required to access INSPECT prior to writing a prescription for a controlled medication?		
Number Eligible	4,981	
Eligible But No Response	90	
Total Number of Responses	4,891	
Yes	1,581	(32.3)
No	3,310	(67.7)
Should criminal justice professionals (e.g., police, the DEA) be allowed to access INSPECT for patient information?		
Number Eligible	4,981	
Eligible But No Response	121	
Total Number of Responses	4,860	
No	708	(14.6)
Yes	1,376	(28.3)
Yes, but only under certain circumstances	2,776	(57.1)
Number Eligible	2,776	
Eligible But No Response	37	
Total Number of Responses	2,739	
To identify potential drug diversion for illicit purposes	1,580	(57.7)
During the investigation of an ongoing case involving controlled substances	2,540	(92.7)
Under other certain circumstances	131	(4.8)
Should criminal justice professionals (e.g., police, the DEA) be allowed to access INSPECT to determine if medical providers are potentially overprescribing controlled prescription medication?		
Number Eligible	4,981	
Eligible But No Response	90	
Total Number of Responses	4,891	
No	775	(15.8)
Yes	1,691	(34.6)
Yes, but only under certain circumstances	2,425	(49.6)
Number Eligible	2,425	
Eligible But No Response	36	
Total Number of Responses	2,389	
To identify potential “pill mills”	1,465	(61.3)
During the investigation of an ongoing case involving controlled substances.	2,131	(89.2)
Under other certain circumstances	127	(5.3)



Table 10a. Characteristics of Survey Participants Who Believe Medical Professionals Should and Should Not Be Required to Check INSPECT Prior to Writing a Prescription for a Controlled Substance Medication

	Should be required to check INSPECT		Should not be required to check INSPECT		χ^2	<i>p</i>
	N	(%)	N	(%)		
License Type						
Medical Doctor	319	(20.2)	1305	(39.4)	14.5	<.001
Doctor of Osteopathy	29	(1.8)	119	(3.6)	3.9	<.001
Doctor of Podiatric Medicine	5	(0.3)	30	(0.9)	2.8	0.005
Physician Assistant	26	(1.6)	138	(4.2)	5.5	<.001
Nurse Practitioner	254	(16.1)	544	(16.4)	0.3	0.790
Dentist	67	(4.2)	523	(15.8)	14.3	<.001
Pharmacist	860	(54.4)	586	(17.7)	25.9	<.001
Other	5	(0.3)	28	(0.8)	2.4	0.016
Not provided	16	(1.0)	37	(1.1)		
Practice Type						
Adult	320	(20.2)	1033	(31.2)	8.5	<.001
Pediatric	33	(2.1)	179	(5.4)	6.2	<.001
Both	328	(20.7)	1397	(42.2)	16.1	<.001
Not applicable – Pharmacists	860	(54.4)	586	(17.7)	.259	<.001
Not provided	40	(2.5)	115	(3.5)		
Gender						
Male	656	(41.5)	1798	(54.3)	8.5	<.001
Female	888	(56.2)	1430	(43.2)	8.6	<.001
Not provided	37	(2.3)	82	(2.5)		
Race						
Asian	95	(6.0)	108	(3.3)	4.0	<.001
African-American	44	(2.8)	58	(1.8)	2.1	0.035
Caucasian	1334	(84.4)	2916	(88.1)	3.5	.001
Latino	22	(1.4)	28	(0.8)	1.8	0.072
Other Race	44	(2.8)	97	(2.9)	0.2	0.844
Not provided	42	(2.7)	103	(3.1)		
Age						
<35 years	349	(22.1)	482	(14.6)	6.2	<.001
36-45	342	(21.6)	693	(20.9)	0.6	0.577
45-55	372	(23.5)	837	(25.3)	1.4	0.169
56 and older	469	(29.7)	1183	(35.7)	4.2	<.001
Not provided	49	(3.1)	115	(3.5)		
Years in Practice						
5 years or less	384	(24.3)	638	(19.3)	3.9	<.001
6-10 years	215	(13.6)	456	(13.8)	0.2	0.849
11-19 years	296	(18.7)	687	(20.8)	1.7	0.082
20-29 years	314	(19.9)	718	(21.7)	1.5	0.145
30-39 years	228	(14.4)	567	(17.1)	2.5	0.014
40 years or more	98	(6.4)	191	(5.8)	4.1	<.001
Not provided	46	(2.9)	53	(1.6)		



Impact of INSPECT on Prescribing and Dispensing Behavior

To determine what impact INSPECT may be having on prescribing behavior, the 3,148 participants who had both heard of INSPECT and who had prescribed controlled substances in the past 12 months were asked if they believed that law enforcement and regulatory agencies had used INSPECT to monitor their prescribing behavior

more closely. Only a minority of participants (36.4%) believed their prescribing behaviors were being monitored more closely. Respondents who believed they were being monitored were further asked if they had changed their prescribing practices in light of this increased monitoring. A small percentage of these participants (17.5%) said that they had changed their prescribing practices and were now prescribing fewer or far fewer controlled substances (see Table 11).

Table 11. Impact of INSPECT on Prescribing Behavior

		N	(%)
In the past twelve month period do you believe that law enforcement and regulatory agencies have used INSPECT to monitor your prescribing behavior more closely?			
	Number Eligible	3,148	
	Eligible But No Response	78	
	Total Number of Responses	3,070	
Yes		1,117	(36.4)
No		1,953	(63.6)
Has this caused you to change your prescribing practices regarding controlled medication?			
	Number Eligible	1,117	
	Eligible But No Response	11	
	Total Number of Responses	1,106	
Yes		194	(17.5)
No		912	(82.5)
How have your prescribing practices changed due to your perception of greater oversight?			
	Number Eligible	194	
	Eligible But No Response	8	
	Total Number of Responses	186	
I prescribe FAR FEWER controlled substances		60	(32.3)
I prescribe FEWER controlled substances		122	(65.6)
I prescribe MORE controlled substances		4	(2.2)

The survey asked the 1,910 participants who dispensed controlled substances in the past 12 months and who had heard of INSPECT a parallel set of questions regarding monitoring of their dispensing behavior. Just over 30 percent (32.9%) of dispensers believed that law enforcement and regulatory agencies had been using INSPECT to monitor their dispensing behavior more closely. Of

dispensers who believed they were being monitored (n = 613), most (70.2%) had not changed their dispensing practices. Dispensers that had changed their dispensing practices due to their perception of greater oversight (29.8%) said they were now dispensing fewer or far fewer controlled substances (see Table 12).



Table 12. Impact of INSPECT on Dispensing Behavior

		N	(%)
In the past 12 month period do you believe that law enforcement and regulatory agencies have used INSPECT to monitor your dispensing behavior more closely?			
	Number Eligible	1,910	
	Eligible But No Response	45	
	Total Number of Responses	1,865	
Yes		613	(32.9)
No		1,252	(67.1)
Has this caused you to change your dispensing practices regarding controlled medications?			
	Number Eligible	613	
	Eligible But No Response	9	
	Total Number of Responses	604	
Yes		180	(29.8)
No		424	(70.2)
How have your dispensing practices changed due to your perception of greater oversight?			
	Number Eligible	180	
	Eligible But No Response	2	
	Total Number of Responses	178	
I dispense FAR FEWER controlled substances		23	(12.9)
I dispense FEWER controlled substances		143	(80.3)
I dispense MORE controlled substances		12	(6.7)

Other Changes in Prescribing and Dispensing Behavior

To explore whether any general trends existed in prescribing and dispensing of controlled substances, all survey participants who reported prescribing (n = 3,783) or dispensing controlled substances (n = 2,145) in the past year were asked whether their prescribing or dispensing practices related to controlled substances had changed in the past 12 months. Of the prescribers in the sample, most (64.3%) stated that they had not made any changes

in their prescribing practices related to controlled substances in the past 12 months. Prescribers that reported making changes indicated that they were now prescribing fewer or far fewer controlled substances. The factors most commonly cited by prescribers for the change in their prescribing practices were an increased professional awareness of risks, benefits, and other solutions and INSPECT providing greater access to patient prescription drug histories (see Table 13).



Table 13. Changes in Prescribing Practices in the Past 12 Months.

	N	(%)
In the past 12 month period have you changed your prescribing practices related to controlled substances?		
Number Eligible	3,783	
Eligible But No Response	72	
Total Number of Responses	3,711	
Yes	1,325	(35.7)
No	2,386	(64.3)
How have your prescribing practices changed?		
Number Eligible	1,325	
Eligible But No Response	32	
Total Number of Responses	1,293	
I prescribe FAR FEWER controlled substances	317	(24.5)
I prescribe FEWER controlled substances	867	(67.1)
I prescribe MORE controlled substances	96	(7.4)
I prescribe FAR MORE controlled substances	13	(1.0)
What factors led you to change your prescribing practices?		
Number Eligible	1,325	
Eligible But No Response	27	
Total Number of Responses	1,298	
Change in patient mix	345	(26.6)
New professional practice standards and protocols	556	(42.8)
Increased professional awareness of risks, benefits, and other solutions	905	(69.7)
Increased state or federal guidelines and recommendations	462	(35.6)
Increased law enforcement activity.	135	(10.4)
INSPECT providing greater access to patient prescription drug history	735	(56.6)
Increased patient awareness of risks and benefits	204	(15.7)
I am afraid of legal ramifications	203	(15.6)
Increased referrals from other physicians/providers for treatment of acute (surgical/traumatic/short-term) pain patients	66	(5.1)
Increased referrals from other physicians/providers for treatment of chronic pain patients	122	(9.4)
Other reason for change	134	(10.3)

Regarding the individuals who reported dispensing controlled substances in the past 12 months, just over one third (35.2%) admitted to making changes to their dispensing practices. Dispensers who made a change in their dispensing practices primarily said they were now dispensing fewer controlled substances (69.3%). Dispensers said the

main reasons for making changes in their dispensing practices were due to an increased professional awareness of risks, benefits, and other solutions; INSPECT providing greater access to patient prescription drug histories; and new professional practice standards and protocols (see Table 14).



Table 14. Changes in Dispensing Practices in the Past 12 months.

	N	(%)
In the past 12 month period, have you changed your dispensing practices related to controlled substances?		
Number Eligible	2,145	
Eligible But No Response	45	
Total Number of Responses	2,100	
Yes	739	(35.2)
No	1,361	(64.8)
How have your dispensing practices changed?		
Number Eligible	739	
Eligible But No Response	22	
Total Number of Responses	717	
I dispense FAR FEWER controlled substances	101	(14.1)
I dispense FEWER controlled substances	497	(69.3)
I dispense MORE controlled substances	101	(14.1)
I dispense FAR MORE controlled substances	18	(2.5)
What factors led you to change your dispensing practices?		
Number Eligible	739	
Eligible But No Response	20	
Total Number of Responses	719	
Change in my patient mix	189	(26.3)
New professional practice standards and protocols	368	(51.2)
Increased awareness of risks, benefits, and other solutions	383	(53.3)
Increased state or federal guidelines and recommendations	274	(38.1)
Increased law enforcement activity	99	(13.8)
INSPECT providing greater access to patient prescription drug history	375	(52.2)
Increased patient awareness of risks and benefits	73	(10.2)
I am afraid of legal ramifications	135	(18.8)
Increased referrals from other physicians/providers for treatment of acute (surgical/traumatic/short-term) pain patients	52	(7.2)
Increased referrals from other physicians/providers for treatment of chronic pain patients.	86	(12.0)
Other reason	95	(13.2)

General Views of Prescription Drug Abuse

To gauge participants' perceptions of the abuse of controlled prescription medication, the survey had all respondents (N = 5,994) report how concerned they were about controlled prescription drug abuse among the patients in their practice and then how concerned they were about controlled prescription drug abuse in their community. In terms of their practice, over half of all survey respondents (57.4%) were at least moderately concerned about controlled prescription drug abuse among their patients. Respondents appeared much more concerned about controlled prescription drug abuse within the community with 85.7% reporting at least moderate

concern (see Table 12). The survey next asked respondents to indicate what percent of their patients who take controlled prescription medications they felt misused or abused these medications. The largest percentage of respondents (44.4%) believed that one to 10.0% of their patients were misusing or abusing their controlled prescription medication. When the survey had participants indicate what percent of patients in Indiana taking controlled prescription medications were misusing or abusing their medication, most participants believed the percentage was somewhere between 11.0% to 20.0% (23.6%) or 21.0% to 30.0% (22.2%) of patients (see Table 15).



Table 15. Concerns about and Estimates of Controlled Prescription Medication Misuse or Abuse

	N	(%)
How concerned are you about prescription drug abuse among the patients in your practice?		
Number Eligible	5,994	
Eligible But No Response	195	
Total Number of Responses	5,799	
Extremely concerned	1,436	(24.8)
Moderately concerned	1,893	(32.6)
Slightly concerned	1,726	(29.8)
Not concerned at all	744	(12.8)
How concerned are you about prescription drug abuse in your community?		
Number Eligible	5,994	
Eligible But No Response	180	
Total Number of Responses	5,814	
Extremely concerned	2,668	(45.9)
Moderately concerned	2,315	(39.8)
Slightly concerned	736	(12.7)
Not concerned at all	95	(1.6)
What percent of your patients who are taking controlled prescription medications do you feel misuse/abuse the medications?		
Number Eligible	5,994	
Eligible But No Response	239	
Total Number of Responses	5,755	
0%	552	(9.6)
1-10%	2,553	(44.4)
11-20%	951	(16.5)
21-30%	672	(11.7)
31-40%	325	(5.6)
41-50%	276	(4.8)
51-60%	230	(4.0)
61-70%	0	(0.0)
71-80%	132	(2.3)
81-90%	46	(0.8)
91-100%	18	(0.3)
What percent of patients in Indiana taking controlled prescription medications do you feel misuse/abuse the medication?		
Number Eligible	5,994	
Eligible But No Response	311	
Total Number of Responses	5,683	
0%	81	(1.4)
1-10%	1,008	(17.7)
11-20%	1,339	(23.6)
21-30%	1,264	(22.2)
31-40%	658	(11.6)
41-50%	510	(9.0)
51-60%	383	(6.7)
61-70%	188	(3.3)
71-80%	178	(3.1)
81-90%	54	(1.0)
91-100%	20	(0.4)



Use of Controlled Substances

To determine how widely used participants thought controlled prescription medications were, the survey asked participants to estimate the percent of their patients who they believed were currently prescribed opioids, stimulants, CNS depressants, or opioids combined with benzodiazepines. Most participants did not believe that opioids,

stimulants, CNS depressants, or opioids combined with benzodiazepines were commonly prescribed to their patients. The largest percentage of participants estimated that one to 10.0% of their patients were currently prescribed opioids (32.1%), stimulants (44.4%), CNS depressants (32.0%), or opioids with benzodiazepines (33.1%, see Table 16).

Table 16. Percent of Patients Prescribed Controlled Substances

	N	(%)
What percentage of your patients do you estimate are currently prescribed opioids (pain relievers)?		
Number Eligible	5,994	
Eligible But No Response	484	
Total Number of Responses	5,510	
0%	467	(8.5)
1-10%	1,769	(32.1)
11-20%	918	(16.7)
21-30%	777	(14.1)
31-40%	438	(7.9)
41-50%	307	(5.6)
51-60%	214	(3.9)
61-70%	213	(3.9)
71-80%	147	(3.2)
81-90%	142	(2.6)
91-100%	91	(1.7)
What percentage of your patients do you estimate are currently prescribed stimulants?		
Number Eligible	5,994	
Eligible But No Response	693	
Total Number of Responses	5,301	
0%	1,448	(28.1)
1-10%	2,355	(44.4)
11-20%	711	(13.4)
21-30%	398	(7.5)
31-40%	166	(3.1)
41-50%	86	(1.6)
51-60%	43	(0.8)
61-70%	24	(0.5)
71-80%	16	(0.3)
81-90%	10	(0.2)
91-100%	4	(0.1)



Table 16 Cont. Percent of Patients Prescribed Controlled Substances

	N	(%)
What percentage of your patients do you estimate are currently prescribed CNS depressants?		
Number Eligible	5,994	
Eligible But No Response	664	
Total Number of Responses	5,330	
0%	969	(18.2)
1-10%	1,705	(32.0)
11-20%	911	(17.1)
21-30%	664	(12.5)
31-40%	380	(7.1)
41-50%	261	(4.9)
51-60%	173	(3.2)
61-70%	133	(2.5)
71-80%	82	(1.5)
81-90%	40	(0.8)
91-100%	12	(0.2)
How often are opioids and benzodiazepines prescribed simultaneously for your patients?		
Number Eligible	5,994	
Eligible But No Response	415	
Total Number of Responses	5,579	
0%	1,610	(28.9)
1-10%	1,848	(33.1)
11-20%	631	(11.3)
21-30%	443	(7.9)
31-40%	289	(5.2)
41-50%	232	(4.2)
51-60%	190	(3.4)
61-70%	128	(2.3)
71-80%	126	(2.3)
81-90%	54	(1.0)
91-100%	28	(0.5)



Management of Patients with Chronic Non-Terminal Pain

The next section of the survey had participants report on their treatment of patients with chronic non-terminal pain. The survey asked all participants, except for Pharmacists (n = 4,306), to indicate what percentage of their patients they see for chronic, non-terminal pain. Of participants who provided an estimate, the largest percentage (41.4%) said they saw no patients for treatment of chronic, non-terminal pain. Survey participants who reported seeing any patients for chronic, non-terminal pain (n = 2,437) were asked to indicate how they typically managed these patients. Most respondent (53.8%) said they managed chronic, non-terminal pain patients within their practice in consultation with other professionals as needed. The remaining respondents managed patients with chronic non-terminal pain on their own (11.4%) or referred these patients to other practitioners (34.8%).

Survey participants that managed patients with chronic, non-terminal pain within their practice (n = 1,545) were asked a series of follow-up questions

regarding their treatment approach. When asked how often they used validated mental health screening tools, such as the Patient Health Questionnaire, to screen their chronic, non-terminal pain patients for mental health issues before prescribing opioids, most respondents said they rarely (26.8%) or never (35.9%) did so. Similarly most participants rarely (27.0%) or never (49.3%) used validated addiction screening tools, such as the Opioid Risk Tool, to screen their chronic, non-terminal pain patients for potential addiction issues. Survey participants were also not very likely to use urine or other drug screening to monitor their chronic, non-terminal pain patients on opioids with only 30.0% reporting that they always (12.7%) or usually (17.3%) did so. Lastly, respondents who managed patients with chronic, non-terminal pain in their practice were asked to indicate how they monitored their patients' response to pain medications. Most respondents said that they used their patients' self-reports of pain alleviation (85.0%), used their patients' self-reports of physical and psychosocial functioning (73.3%), or used their personal observations of their patients' physical functioning (74.7%; see Table 17).



Table 17. Treatment of Patients with Chronic, Non-Terminal Pain

	N	(%)
What percentage of your patients do you see for chronic, non-terminal pain?		
Number Eligible	4,306	
Eligible But No Response	145	
Total Number of Responses	4,161	
0%	1,724	(41.4)
1-10%	1,302	(31.3)
11-20%	421	(10.1)
21-30%	238	(5.7)
31-40%	155	(3.7)
41-50%	84	(2.0)
51-60%	56	(1.3)
61-70%	52	(1.2)
71-80%	47	(1.1)
81-90%	40	(1.0)
91-100%	42	(1.0)
How do you typically manage your patients with chronic, non-terminal pain?		
Number Eligible	2,437	
Eligible But No Response	67	
Total Number of Responses	2,370	
I am comfortable managing these patients within my practice.	271	(11.4)
I manage these patients within my practice in consultation with other professionals as needed.	1,274	(53.8)
I refer all patients with chronic pain medication needs.	825	(34.8)
How often do you use validated mental health screening tools to screen your chronic, non-terminal pain patients for mental health issues before prescribing opioids?		
Number Eligible	1,545	
Eligible But No Response	26	
Total Number of Responses	1,519	
Always	102	(6.7)
Usually	192	(12.6)
Occasionally	272	(17.9)
Rarely	407	(26.8)
Never	546	(35.9)
How often do you use validated addiction screening tools to screen your chronic, non-terminal pain patients for potential addiction issues?		
Number Eligible	1,545	
Eligible But No Response	27	
Total Number of Responses	1,518	
Always	66	(4.3)
Usually	101	(6.7)
Occasionally	193	(12.7)
Rarely	410	(27.0)
Never	748	(49.3)



Table 17 Cont. Treatment of Patients with Chronic, Non-Terminal Pain

		N	(%)
How often do you use urine or other drug screening to monitor your chronic, non-terminal pain patients on opioids?			
	Number Eligible	1,545	
	Eligible But No Response	44	
	Total Number of Responses	1,501	
Always		190	(12.7)
Usually		259	(17.3)
Occasionally		354	(23.6)
Rarely		288	(19.2)
Never		410	(27.3)
How do you monitor patient response to pain medications?			
	Number Eligible	1,545	
	Eligible But No Response	33	
	Total Number of Responses	1,512	
Patient self-report of pain alleviation		1,285	(85.0)
Patient self-report of physical and psychosocial function		1,108	(73.3)
Observation of physical function		1,130	(74.7)
Other		121	(8.0)

Risks and Benefits of Opioid Treatment for Chronic Non-Terminal Pain

The final three questions on the survey asked all respondents (N = 5,994) to rank their level of knowledge of the medical risks of opioid treatment for chronic non-terminal pain patients, rank their level of knowledge of the benefits of opioid treatment for chronic non-terminal pain patients, and rank their level of knowledge of the risks and benefits of prescribing opioids and benzodiazepines

together. Most respondents ranked their level of knowledge about the benefits of opioid treatment to be moderately high (42.9%). Similarly, most survey participants rated their knowledge about the risks of opioid treatment to also be moderately high (40.8%). In terms of the risks and benefits of prescribing opioids and benzodiazepines together, the largest percentage of survey respondents (37.8%) also viewed their knowledge as moderately high (see table 18).



Table 18. Knowledge of Risks and Benefits of Opioid Treatment

		N	%
Rank your level of knowledge of the medical risks of opioid treatment for chronic non-terminal pain patients			
	Number Eligible	5,994	
	Eligible But No Response	209	
	Total Number of Responses	5,785	
1 – Low		142	(2.5)
2		139	(2.4)
3		236	(4.1)
4		211	(3.6)
5		657	(11.4)
6		555	(9.6)
7		1,102	(19.0)
8		1,382	(23.9)
9		752	(13.0)
10 – High		609	(10.5)
Rank your level of knowledge of the medical benefits of opioid treatment for chronic non-terminal pain patients.			
	Number Eligible	5,994	
	Eligible But No Response	186	
	Total Number of Responses	5,808	
1 – Low		165	(2.8)
2		165	(2.8)
3		290	(5.0)
4		275	(4.7)
5		759	(13.1)
6		601	(10.3)
7		1,106	(19.0)
8		1,268	(21.8)
9		658	(11.3)
10 – High		521	(9.0)
Rank your level of knowledge of the medical risks/benefits of prescribing opioids and benzodiazepines together.			
	Number Eligible	5,994	
	Eligible But No Response	244	
	Total Number of Responses	5,750	
1 – Low		207	(3.6)
2		165	(2.9)
3		279	(4.9)
4		246	(4.3)
5		662	(11.5)
6		505	(8.8)
7		927	(16.1)
8		1,250	(21.7)
9		771	(13.4)
10 – High		738	(12.8)



**OPEN-ENDED
QUESTION
RESPONSE
SUMMARIES**

Two open-ended questions sought input from respondents on patients’ and the community’s educational needs and their thoughts about the issues covered in the survey. Over one thousand survey participants submitted comments (n = 1,725) resulting in 3,891 statements covering education, policy, monitoring, and practice. Table 19 provides a breakdown of the coding for the 3,891 statements. Overall, the emergent themes centered on content

or target audience. Each of the four broad themes was distinguished by sub-themes coalescing around the content or the target population indicated. The following sections briefly summarize the responses to the open-ended questions. Sample quotations and frequency values by theme as well as subthemes are included to provide a deeper perspective on the range of comments offered.

Table 19. Coding scheme for open-ended questions

Theme	N	(%)
Education		
General Education Comments	187	(4.8)
Patients	391	(10.0)
Providers	97	(2.5)
Clinical best practice/s	230	(5.9)
Law enforcement/regulations	93	(2.4)
National/State/Local data	39	(1.0)
Research	67	(1.7)
Community	118	(3.0)
Policy		
General policy comments	6	(0.2)
General health	97	(2.5)
Drug	115	(3.0)
Institutional	9	(0.2)
Government	95	(2.4)
Expand	131	(3.4)
Constrict	92	(2.4)
Hospital/practice settings	134	(3.4)
Patient accountability	92	(2.4)
Monitoring		
General monitoring comments	209	(5.4)
Improve INSPECT	319	(8.2)
Linkages	91	(2.3)
Monitoring of providers	96	(2.5)
Practice		
General practice comments	635	(16.3)
Screening and evaluation	178	(4.6)
Interventions	208	(5.3)
Alternative	58	(1.5)
Improve communication	104	(2.7)



Education

Education comments (n = 1,222) included suggestions for information targeting patients (n = 391), providers (n = 526), and the community (n = 118). A number of responses indicated that survey participants either provide or would provide materials to their patients. Participants asked that these materials be easily understood by the general population and written at an elementary reading level. Responses regarding patient education and community education made up the majority of comments across all themes. Regarding patient education, one participant wrote:

“Maybe when we Rx opioids, we should require handouts about opioid risks, benefits, and the average time before a typical pt [patient] may become addicted. Pts don’t realize addiction can happen to anyone. They also don’t seem to hear enough about non-addictive side effects: constipation, etc. Also, many pts seem to drive vehicles on opioids and then they’re surprised when they get in an accident. They don’t seem to realize their reaction time is slowed.”

On the pharmacy end, “Let it be known that all pharmacies will not fill any controlled Rx no sooner than 3 days before next fill is due and publicize to patients and Drs. that this is a standard of practice.” Survey respondents would also like to see education targeting the community. For example, one participant stated:

“More awareness in the community on the dangers of drug addiction, opioid and benzodiazepine abuse. Increased education should be mandated to general practitioners in the use of these medications, as the epidemic is starting at that level - little education in residency is given to general practitioners, yet they are the forefront of addiction medicine.”

Only a rare few participants felt additional education would have no impact as most comments encouraged monitoring and public health agencies to distribute patient and community-level education materials and campaigns.

As addressed in the previous comment, a number of participants suggested educational forums targeting medical providers (n = 526), especially specific to best prescribing practices (n = 230), current regulations and law enforcement efforts (n = 93), national/state/local statistics on prescription drug abuse (n = 39), as well as further research on appropriate treatment modalities and improved prescribing practice (n = 67). One participant spoke about these needs in the following,

“Education regarding best-practice policies and procedures for prescribing and monitoring controlled substances. Education regarding better prescreening for patients for whom you are considering prescribing controlled substances. Better education about ways to counsel patients about risks of chronic controlled substances.”

In support of recent efforts one participant stated, “The DEA presentation/CE seminar last December was excellent. I think we should have more of those. It was free, it was applicable, and I got CE [continuing education].” Speaking to data needs, a participant wrote, “If INSPECT data is being analyzed for trends, percentages, etc., I would like to hear about that data.” And finally, regarding further research, “[I’m] interested in knowing what the risk/benefits of ADHD medication use is in adults. What is the best regimen for chronic pain?” In total, comments request further educational materials for patients, campaigns targeting the community, and continuing education opportunities that cover prescribing practices, regulations/law enforcement, data, and further research.

Policy

Policy comments (n= 771) discussed general health (n = 97), drug (n = 115), institutional (n = 461), which was broken down into government policy (n = 318) and practice site/professional organizations (n = 134), and patient accountability (n = 92). Government policy requests were further broken down into whether the comment suggested constricting government action (n = 131) or expanding it (n = 92). A significant number of policy comments regarding general health involved insurance coverage issues, e.g. insurance not covering pain management. Indeed, a number of comments requested Medicaid coverage of pain management and the time to manage the best treatment plan. Regarding drug policy, one provider stated,

“There needs to be a consistent policy that is on the state and federal level about how to deal with chronic pain. The fed and JC [Joint Commission] want us to inquire about “level of pain”, “rate your pain level”, etc. and then they expect us to treat this pain aggressively (often with opiates). That is wrong. Acute pain should be treated aggressively but chronic pain is different. Patients need to know that there is a standard policy of how physician will deal with chronic pain.”

Furthermore, many responses indicated drug policy needs to be enacted whereby all prescriptions include the diagnosis code. Governmental policy comments ranged from increasing oversight, e.g. “Benzodiazepines should be made illegal.” to decreasing oversight, e.g. “I am not a proponent of



the new legislation...vaguely defines ‘chronic pain’ in such a way that even acute pain or immediate postop pain could fall under that definition and that it is therefore too limiting and provides too many hoops to jump through for surgeons and their practices.”

Many participants argued for reversing JCAHO’s (Joint Commission on Accreditation of Healthcare Organization) “pain as the fifth vital sign” policy. Participants discussed the policy as setting up a conflicted relationship between hospital administrators, providers, and their patients pertaining to pain. Additionally, participants felt patient’s need to take more accountability. For example, one participant stated, “Require patients to sign releases allowing us to inform other MDs/ Probation Officers of their controlled substance Rx before initiation of treatment.” They also spoke of requiring pain contracts as a means to hold patient’s accountable.

Monitoring

Monitoring comments (n = 715) broke down to include ways to improve INSPECT (n = 319), monitoring system linkages (n = 91), and monitoring of providers (n = 96). Several comments suggest ways to improve INSPECT. For example, one participant stated, “I wish there were an easy way for doctors and pharmacists to flag patients’ INSPECT files for obvious drug seeking behavior.” Additionally, a number of participants cited problems with INSPECT’s functioning, such as “Logging into Inspect site was such a hassle, I quit using it.” Indeed a number of participants reflected negatively on requiring a Notary Public for INSPECT’s Registration Form. Another participant stated, “I like INSPECT, but the software should be updated and made more easy to use.” Several participants mentioned including additional medications as reportable to improve INSPECT; for example, “The inclusion of tramadol and non-control Acetaminophen containing products (i.e. Ultracet, Fioricet) on INSPECT would be helpful.”

Many participants requested continued linking of INSPECT within the state, e.g. medical records, as well as across state prescription monitoring programs. Another comment thread considered provider monitoring. A participant stated, “I would like the state to more closely monitor physicians who prescribe large quantities of narcotics on a

regular basis.” However, a number of responses also described the need to prevent government and law enforcement intrusion into medical practice. For example, “Law enforcement (except for a very few state agencies) is totally ignorant and for the most part needs to stay out of it unless invited in by knowledgeable professionals.” This comment speaks to refraining from provider monitoring practices, and a minority of participants’ responses supported this assertion. Overall, however, participants support monitoring through improvements to INSPECT by making it more accessible, user-friendly, linked to other monitoring and record-keeping systems, as well as judicious and knowledgeable medical professionals guiding oversight of other medical providers.

Practice

Practice comments (n = 1,183) include suggested improvements in screening and evaluation (n = 178), treatment alternatives including traditional mechanisms (n = 208), e.g. mental health and substance use treatment, as well as alternative (n = 58), e.g. acupuncture and diet/exercise, and improving communication between providers as well as patient and providers (n = 104). Regarding screening and evaluation the overall suggestion was to provide “User friendly mental health and addiction screening devices.” In terms of intervention practice, a participant stated,

“Pain management tools for self-care. How to cope and adapt to physical limitations from chronic pain. Alternatives to medications such as hypnosis, acupuncture/acupressure, movement modalities. Reframing pain: a psychosocial approach to understanding this culture that so readily wants to mask pain.”

Finally, speaking to the need for improved communication one participant asserted, “A COLLABORATIVE educational program with pharmacists and physicians on how to best approach and control the issue of abuse and over-prescribing of controlled substances.”



CONCLUSIONS

There is a high level of awareness and knowledge of the INSPECT system. The majority of providers surveyed reported being familiar with INSPECT and most who knew about it said they used it. Survey respondents most commonly used INSPECT to monitor their patients' prescriptions, particularly those on controlled substances and those they believed may be engaging in drug seeking behavior. The most significant barrier that respondents encountered in using the system was a lack of time.

Prescribers and dispensers generally agreed that INSPECT is an effective tool for monitoring patient prescriptions, for decreasing doctor shopping, and for decreasing the incidence of controlled substance misuse and diversion. Similarly, most survey respondents agreed that INSPECT data should be accessible to law enforcement personnel when they are investigating cases related to drug diversion, "pill mills", or other types of crimes related to the abuse of controlled substances.

Prescribers and dispensers had a wide variety of views about and experiences incorporating INSPECT into their clinical practice. The majority indicated that they should not be required to use INSPECT and preferred that it be used at the prescribers'/dispensers' discretion.

Most prescribers familiar with INSPECT reported not checking INSPECT prior to writing their most recent prescription for a controlled substance. Still, some prescribers and dispensers have made modifications in their prescribing and/or dispensing habits because of INSPECT with most stating that they have reduced the number of controlled substances that they prescribe and/or dispense.

The respondents also made several important recommendations for improving INSPECT and reducing the burden of prescription drug abuse on the State of Indiana:

- Providers would like more ready access to information regarding prescription drugs, their abuse potential, their benefits when treating acute pain, and alternatives to drug treatment for chronic pain distributed to healthcare locations.
- Survey participants also indicated that they would welcome more continuing educational opportunities for prescribers and dispensers regarding a) best clinical pharmacological practices; b) regulations and law enforcement policies and practices regarding drug diversion; c) current data on trends and patterns of prescription drug misuse; and d) updates on current research on treating acute and chronic pain.

- Respondents indicated that they also would like to see a community campaign implemented on prescription drug misuse and how to dispose of unused/expired medication. Our respondents also recommended that the State launch and educational initiative targeting providers to facilitate more discussion of a broader range of pain management options.
- The majority of the survey participants felt that the government should not require prescribers to review INSPECT prior to writing a prescription for a controlled substance; however, they did feel the State should strongly encourage its use while also improving access to INSPECT and its operational functioning (e.g., moving toward "real-time" data reporting).
- Finally, providers would like clear recommendations for easily administered, comprehensible, and affordable screening and evaluation tools that detect misuse, distinguish between prescription and illicit drugs, and promote accurate histories.

In conclusion, the results of this survey of users suggest that both providers and dispensers are strongly supportive and frequent users of the INSPECT program. The participants' responses indicate that the majority of users believe INSPECT is generally effective and a valuable tool in state-wide efforts to reduce the misuse, abuse, and diversion of prescription drugs. While generally very supportive of the program, the respondents also felt strongly that use of INSPECT should be a professional decision and not the result of a government mandate and that more could and should be done to expand the impact of the program and to improve the system's operational and technical functionality.



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