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Washington's Involuntary Treatment Act:
Use of Non-Emergent Petitions and Less Restrictive Alternatives to Treatment

Under Washington State's Involuntary Treatment Act (ITA), originally passed in 1973, an individual may be civilly committed to treatment if he or she is found to be gravely disabled or a danger to self or others as a result of mental illness.[1] The legal process to determine if a person should be detained for involuntary treatment involves several steps—from initial investigation to court-ordered treatment and ongoing supervision.

In 2015, the Washington State Legislature directed the Washington State Institute for Public Policy (WSIPP) to study two aspects of the involuntary commitment process—non-emergent petitions and less restrictive alternative (LRA) orders to treatment.[2]

This report details trends in these practices and explores variation across court jurisdictions. Our findings are based primarily on an analysis of agency and court records. In addition, we conducted a survey of civil commitment practitioners, including designated mental health professionals, treatment providers, judicial officials, public defenders, and prosecutors.[3]

Summary

Washington State's Involuntary Treatment Act establishes a process under which individuals may be committed by the courts for mental health evaluation and treatment. An involuntary treatment detention may be initiated if an individual is determined by a designated official to be gravely disabled or poses a danger to self or others as a result of a mental illness.

This legislatively directed report examines two aspects of the involuntary commitment process: the use of non-emergent petitions for initial detention and less restrictive alternative orders for outpatient treatment. Our findings are based on a review of available data and an online survey of legal and treatment professionals.

The number of ITA cases handled by courts and treatment professionals increased from 7,478 in 2008 to 9,646 in 2014—a 29% increase. This report describes variations in commitment practices and summarizes comments from judicial officers, prosecutors, public defenders, investigators, and mental health treatment providers on what works well and what could be changed as courts handle an increasing number of involuntary mental health commitments.

Suggested citation: Burley, M., Nicolai, C., & Miller, M. (2015). *Washington's Involuntary Treatment Act: Use of non-emergent petitions and less restrictive alternatives to treatment* (Document Number 15-12-3401). Olympia: Washington State Institute for Public Policy.

[1] RCW 71.05.101.
[2] Engrossed Second Substitute Senate Bill 5649, Chapter 269, Laws of 2015.
[3] A complete copy of the WSIPP survey can be found in Section A. II. of the Technical Appendix.

The legislative assignment for this study (located in the box to the right) directs WSIPP to examine regional variation and state practices related to two aspects of civil commitments in Washington State. To better understand the use of non-emergent detentions and less restrictive alternative orders, we present information on the complete involuntary commitment process, which generally includes the following steps:

1. An investigation is conducted by a designated mental health professional (DMHP) to determine if the subject meets legal criteria for commitment.
2. The DMHP investigator can decide to file a non-emergent petition with a court or have the person held on an emergent basis for a 72-hour detention and evaluation.
3. Following the initial detention, a court hearing is held to decide whether a judicial order for further treatment is necessary. An order may include inpatient treatment or a less restrictive alternative (LRA), such as community-based outpatient treatment.
4. Treatment providers oversee and monitor the terms of the treatment order to assess patient compliance and progress.

Sections 1 and 2 of this report discuss the investigation and initial detention process for a mental health commitment. Sections 3 and 4 present information on court-ordered treatment and monitoring. The Technical Appendix also includes county- and court-level results for 2014, the latest full year of available data.

Legislative Assignment

WSIPP was directed to complete a study by December 1, 2015, regarding the implementation of certain aspects of the involuntary treatment act under chapter 71.05 RCW. The study must include, but is not be limited to the following:

(a) An assessment of the nonemergent detention process provided under RCW 71.05.150, which examines:

(i) The number of nonemergent petitions filed in each county by year;

(ii) The reasons for variation in the use of nonemergent detentions based on feedback from judicial officers, prosecutors, public defenders, and mental health professionals; and

*(iii) Models in other states for handling civil commitments when imminent danger is not present.**

(b) An analysis of less restrictive alternative orders under the involuntary treatment act including:

(i) Differences across counties with respect to:

(A) The use of less restrictive alternatives and reasons why least restrictive alternatives may or may not be utilized in different jurisdictions;

(B) monitoring practices; and

(C) rates of, grounds for, and outcomes of petitions for revocation or modification;

(ii) A systematic review of the research literature on the effectiveness of alternatives to involuntary hospitalizations in reducing violence and rehospitalizations; and

*(iii) Approaches used in other states to monitor and enforce least restrictive orders, including associated costs.**

Engrossed Second Substitute Senate Bill 5649, Chapter 269, Laws of 2015, Sec. 15 (1), emphasis added.

**These sections of the legislative assignment were covered in a previous WSIPP report. See Burley, M., & Morris, M. (2015). Involuntary civil commitments: Common questions and a review of state practices (Doc. No. 15-07-3401). Olympia: Washington State Institute for Public Policy.*

I. ITA Investigations

In 2014, 31,600 adults in Washington State received publicly funded crisis mental health services. A person experiencing a psychiatric emergency may go to community-based providers for assessment, stabilization, and treatment referral.[4] In many of these crisis situations, an individual may be determined by a designated official to pose a danger to self or others and be unwilling to enter treatment. In these cases, a DMHP can conduct an investigation to determine if the subject meets the legal criteria for detention under the state's ITA. In 2014, DMHPs investigated over 14,000 persons to determine if an involuntary detention was necessary.

An investigation for involuntary detention may result in several different outcomes. The investigator may determine the subject does not meet the legal criteria or the subject may agree to enter treatment voluntarily.

If the DMHP determines the individual meets the ITA criteria, then the DMHP must assess whether the danger is imminent. If there is imminent danger to self or others, the person is transported immediately to a treatment facility or hospital for a three-day evaluation period.

Investigation Outcomes

Exhibit 1 (next page) shows the annual number of ITA investigations in Washington between 2008 and 2014. For the approximately 20,000 investigations that take place each year:[5]

- 17% do not meet legal detention criteria and do not begin treatment,
- 31% receive a referral for voluntary services,
- 44% meet legal criteria for involuntary mental health evaluation and treatment, and
- 8% involve an individual already under an existing outpatient order.[6]

The number of investigations and detentions for 2014 in each court jurisdiction and county are in Exhibit A1 of the Technical Appendix.

In Washington State, involuntary treatment commitment hearings are primarily held in 12 different county courts, displayed in Exhibit 2.[7] Court hearings that occur in these 12 court jurisdictions may be based on investigations that originate both inside and outside county boundaries. DMHP investigators are hired by providers that contract with Regional Support Networks (RSNs) that administer public mental health services in Washington State.[8]

[4] Burley, M., & Scott, A. (2015). *Inpatient psychiatric capacity and utilization in Washington State* (Doc. No. 15-01-4102). Olympia: Washington State Institute for Public Policy.

[5] In 2014, 3,642 persons were the subject of two or more ITA investigations. These individuals accounted for nearly half (10,098) of the 20,589 investigations conducted this year.

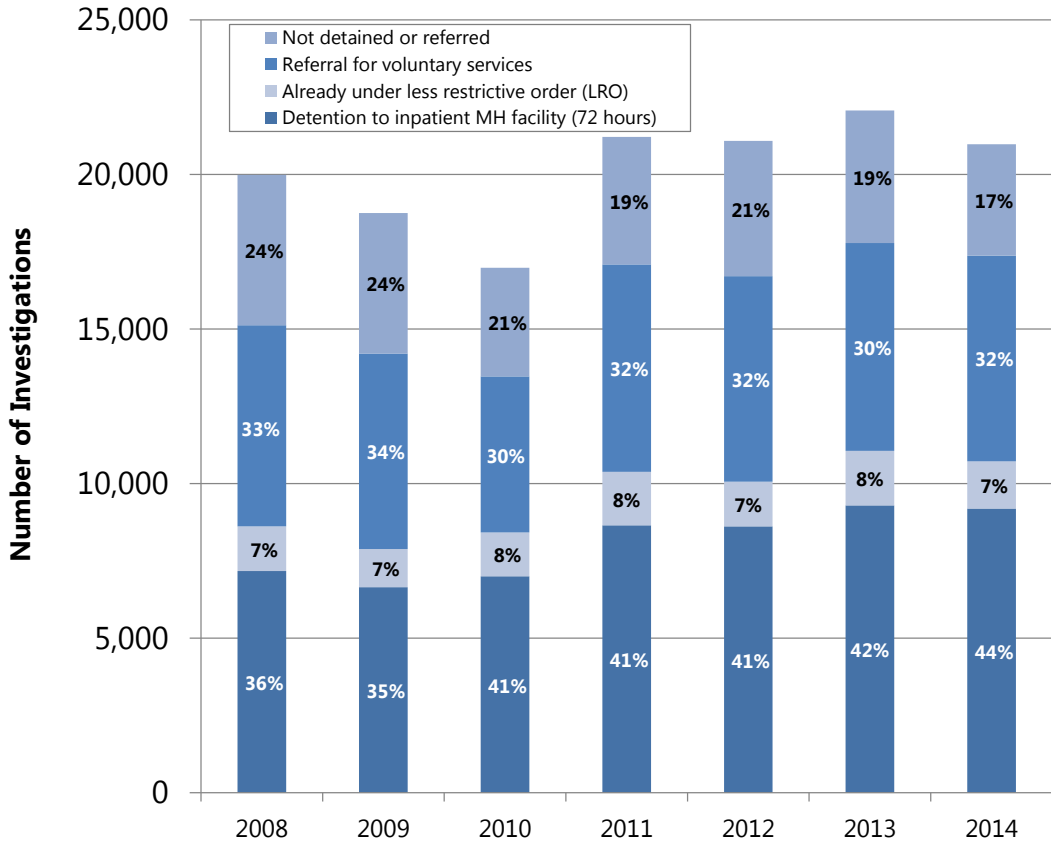
[6] The monitoring and enforcement of outpatient treatment orders is discussed in next section.

[7] 95% of all initial commitment hearings in the state are held in these 12 county courts. See Exhibit A2 in the Technical Appendix.

[8] See https://www.dshs.wa.gov/bhsia/division-behavioral-health-and-recovery/regional-support-networks-rsns-services-information for RSN boundary information.

Exhibit 1

Washington ITA Investigation Outcomes by Year



Non-Emergent Petitions

According to statute, an investigation for a potential mental health commitment must be based on two types of information. First, a DMHP investigator must determine whether the individual has a mental illness and, as a result of this illness, is gravely disabled and/or poses a danger to self or others. Second, if these criteria are met, the DMHP must decide if the danger is considered *imminent*. If so, the DMHP can proceed with an emergent petition and the subject would be taken into emergency custody for up to 72 hours.[9]

However, if the DMHP concludes that there is a *likelihood* of any future danger—that is, the danger is not considered imminent—the DMHP may file a non-emergent petition for detention.[10] If the petition is granted, the respondent is served with an order to appear before a court within 24 hours. A court then hears the facts of the case and a judge or commissioner determines if a 72-hour initial detention is appropriate.

Unfortunately, records of involuntary commitment proceedings available from courts do not distinguish between emergent and non-emergent petitions for detention. Without statewide data on this practice, we

[9] RCW 71.05.153; RCW 71.05.156.

[10] RCW 71.05.150.

cannot draw generalizable conclusions about variation in use for non-emergent petitions from court data alone. The legislature directed WSIPP to solicit feedback from judicial officers, public defenders, and mental health professionals. Thus, we conducted a survey of professionals from these fields.

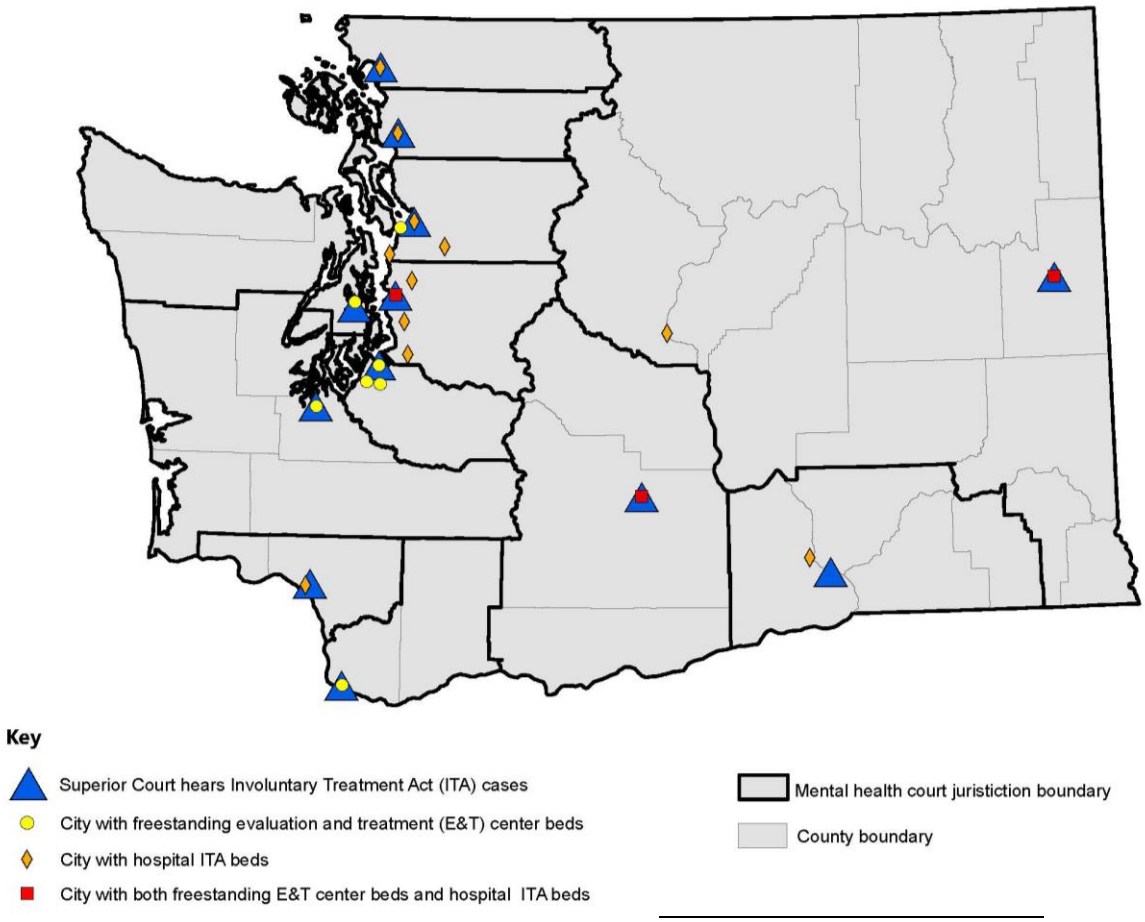
Survey of ITA Practitioners

Informational background interviews were held with representatives from the fields identified in the legislation. Based on these meetings, WSIPP staff developed questions about the ITA commitment process as it relates to non-emergent petitions and LRA orders. In all, 170 individuals responded to our online survey of civil commitment practitioners.[11]

Throughout this report, we summarize common themes from survey respondents. First, we asked the following question:

Exhibit 2

Courts Hearing Involuntary Commitment Cases in Washington



[11] For information on how the WSIPP survey was developed and distributed, see Section A. VI. of the Technical Appendix.

Q: Does your court review and hear cases involving non-emergent petitions for initial detention?

The use of non-emergent petitions for civil commitments was reported by multiple respondents in five different court jurisdictions—King, Pierce, Snohomish, Benton, and Kitsap. Currently, however, King County is the only court jurisdiction that routinely collects data on the number of emergent *and* non-emergent petitions filed.

As Exhibit 3 shows, the total number of petitions for initial detention filed in King County has steadily increased from 2,275 in 2008 to 3,593 in 2014. However, during the last four years, the percentage of total petitions in King County that were non-emergent decreased from 22% to 10%.

Exhibit 3

King County Initial Detentions by Year

Year	Total petitions for initial detention	Number (percent) of non-emergent petitions
2008	2,275	318 (14%)
2009	2,482	482 (19%)
2010	2,805	526 (19%)
2011	3,266	714 (22%)
2012	3,340	707 (21%)
2013	3,425	452 (13%)
2014	3,593	358 (10%)

Q: Why aren't more non-emergent petitions for initial detention reviewed and heard in your jurisdiction?

In courts that used this practice, respondents reported that non-emergent petitions are used infrequently. We included a survey question about why this type of petition is not more common. Two main themes were present in the responses.

First, the ITA statute defines imminence as "the state or condition of being likely to occur at any moment or near at hand, rather than distant or remote."[12] Survey respondents described this definition as broad, providing considerable discretion regarding what may constitute an emergent versus non-emergent situation. Many respondents stated that if the subject of an investigation required treatment, an emergent petition was appropriate and that this approach helped avoid further delays in getting treatment.

Second, several respondents expressed a belief that changes in the ITA statute that took effect in 2012 provides another reason for the sporadic use of non-emergent petitions. These factors allow a DMHP to more fully consider witness accounts, historical factors, and patterns of behavior when deciding whether the need for treatment is imminent and serious.[13]

[12] RCW 71.05.020(20), for a review of state involuntary treatment laws regarding imminent danger and emergency detention, see Burley, M., & Morris, M. (2015). *Involuntary civil commitments: Common questions and a review of state practices* (Doc. No. 15-07-3401). Olympia: Washington State Institute for Public Policy.

[13] RCW 71.05.212.

Q: Why isn't the non-emergent petition process used in your jurisdiction?

According to the majority of respondents, non-emergent petitions are not filed in the other seven jurisdictions surveyed. In these courts, we included a question about why these jurisdictions do not use this option. The most common reason provided from survey respondents was that "existing court resources do not permit consideration of non-emergent cases." The number of ITA cases has increased since 2008, and many respondents reported that emergent cases receive highest priority for court hearings.

The second most commonly reported reason for the absence of non-emergent petitions was that "treatment facilities are not available in the community, so a non-emergent commitment isn't considered." Previous work completed by WSIPP details the high utilization levels for psychiatric inpatient beds across Washington State.[14]

A legislatively directed WSIPP study, due December 2016, will examine bed availability and other factors associated with commitment rates.[15]

[14] Burley & Scott, (2015).
[15] Engrossed Substitute Senate Bill 6002, Chapter 221, Laws of 2014.

II. Detention and Evaluation

Persons subject to an initial petition for detention are typically transported to a crisis triage facility, emergency department of a local hospital, or psychiatric evaluation and treatment (E&T) center. In Washington State, currently 12 psychiatric units in community hospitals and 12 sixteen-bed free-standing E&T centers throughout the state can accept involuntary treatment admissions.[16]

An individual admitted to these facilities must be evaluated by an authorized clinician or mental health professional upon arrival.[17] If the evaluator concludes that the individual meets legal commitment criteria, he or she may be held for up to 72 hours (not including weekends or holidays). If the individual is still being held (or has not been released) at the end of the 72-hour detention period, then the mental health treatment team can decide to release the individual, recommend additional care on a voluntary basis, or petition a court for further treatment via an involuntary treatment order.

As Exhibit 4 (next page) shows, the number of treatment petitions considered by the courts increased by 29% in the last six years, from 7,478 in 2008 to 9,646 in 2014. The increase in court activity related to involuntary treatment petitions is not due solely to general population growth. Exhibit 5 demonstrates that the per capita rate of petitions actually increased during this period as well—from 1.13 petitions per 1,000 persons in 2008 to 1.38 petitions per 1,000 persons in 2014, a 22% increase. Between 2008 and 2014, courts decided to commit defendants for further treatment in over half (57%) of cases filed. Additionally, in about one of five cases, there is an "uncontested resolution," where the individual being evaluated and the treatment team come to an agreement out of court for a treatment order. The remaining cases are either dismissed or closed.

The decision to commit varies across Washington's judicial jurisdictions. In the three largest courts—King, Spokane, and Snohomish—about two-thirds of all involuntary treatment cases result in a court order to commit an individual to treatment following the initial hearing (see Technical Appendix, Exhibit A2). These three courts have similar rates of agreed (uncontested) orders for further treatment. If the patient agrees to voluntarily accept treatment, the patient does not have to be detained and can instead be placed directly into a treatment program or facility.

The next section discusses differences in the types of treatment orders and adjustments that can occur to ordered treatment over time.

[16] Ibid.
[17] RCW 71.05.210.

Exhibit 4

Involuntary Treatment Petitions Cases Filed by Year: 2008-2014

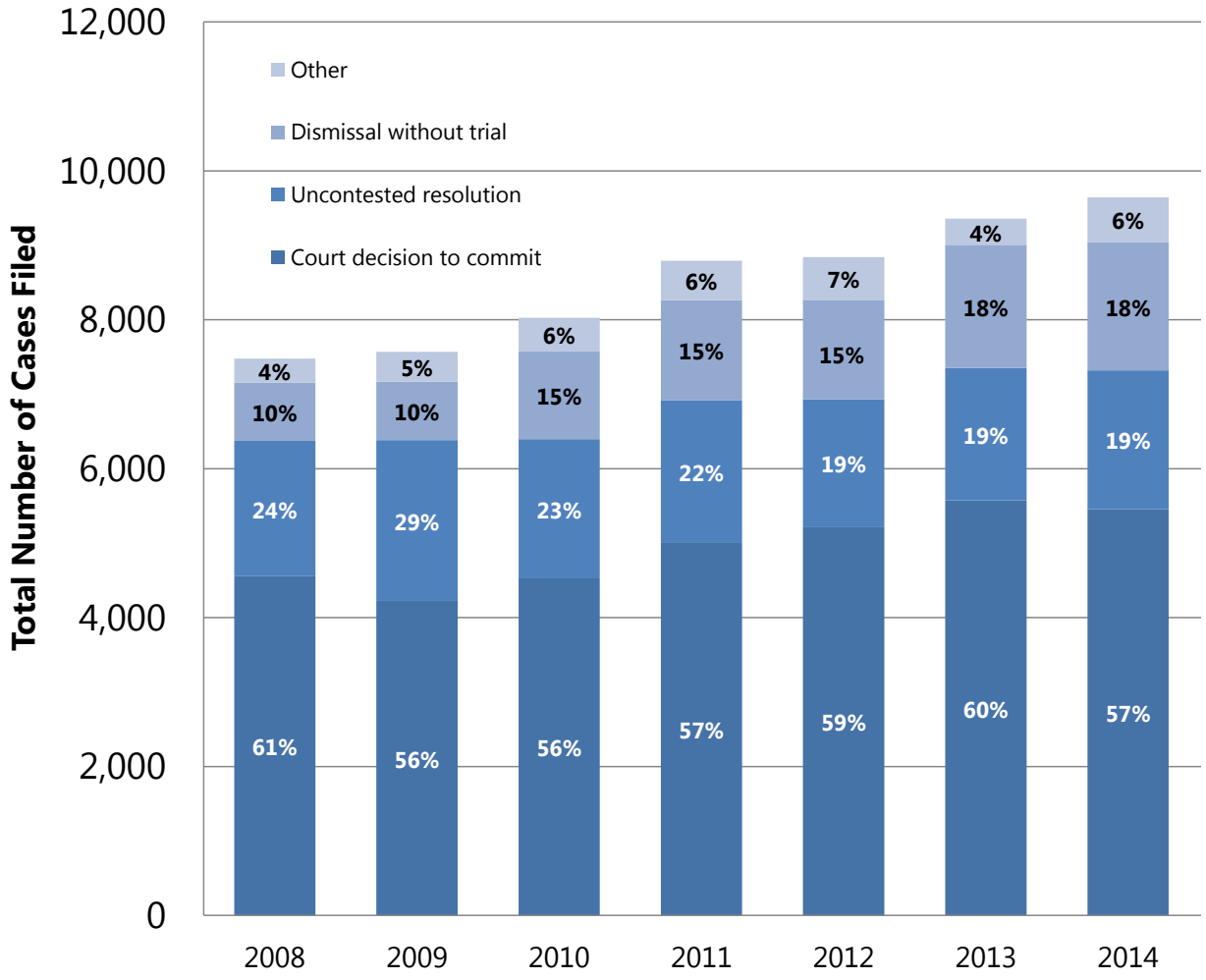


Exhibit 5

Involuntary Treatment Petition Filing Rate

Year	2008	2009	2010	2011	2012	2013	2014
Petitions	7,478	7,571	8,027	8,793	8,842	9,360	9,646
Total population	6,608,245	6,672,159	6,724,540	6,767,900	6,817,770	6,882,400	6,968,170
Petitions per 1,000	1.13	1.13	1.19	1.30	1.30	1.36	1.38

III. Involuntary Treatment Orders after the Initial Detention

Once a court hears a petition for involuntary mental health treatment, several potential resolutions may be considered. If the individual no longer meets criteria for dangerousness or grave disability, a court does not order a treatment commitment, and the individual is released. Alternatively, if involuntary treatment appears necessary, the ITA statute provides two options for ongoing treatment.

First, a court may determine that a patient continues to pose a danger to self or others and should remain involuntarily hospitalized for a period of 14 days. As Exhibit 6 shows, the 14-day inpatient commitment order is the most common outcome following an initial detention. Second, a court may order an extended outpatient treatment plan.

Less Restrictive Alternatives (LRA)

A 90-day less restrictive alternative (LRA) outpatient treatment order can also be directed by a court. An LRA typically follows a 14-day inpatient stay, but may be ordered following the 72-hour detention period.

Exhibit 6

Involuntary Treatment Commitment Hearings by Year

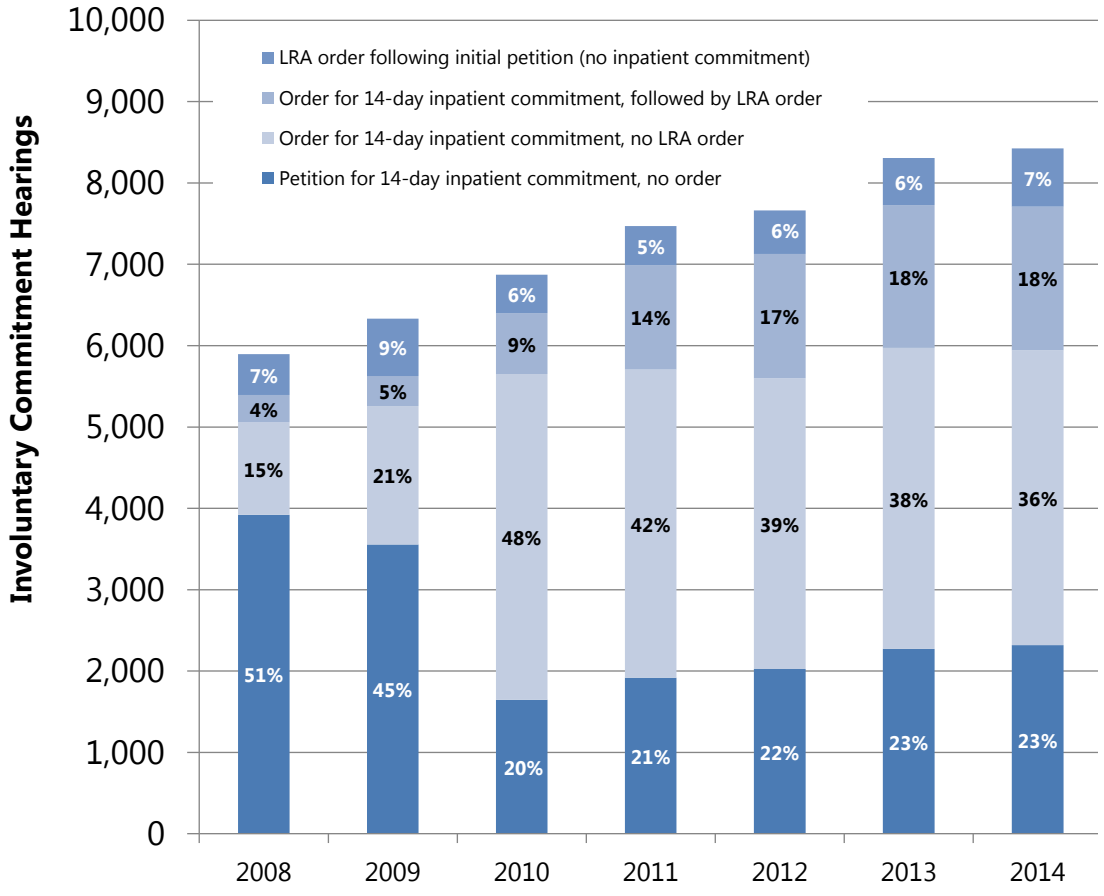


Exhibit 6 (previous page) demonstrates the increasing use of LRA outpatient orders. In 6% to 7% of court hearings, a 90-day LRA is issued immediately following the 72-hour detention. More commonly, however, conditions for outpatient treatment are ordered following the hospital commitment. In total, the use of outpatient LRAs more than tripled—from 753 in 2008 to 2,379 in 2014 (see Exhibit 7).

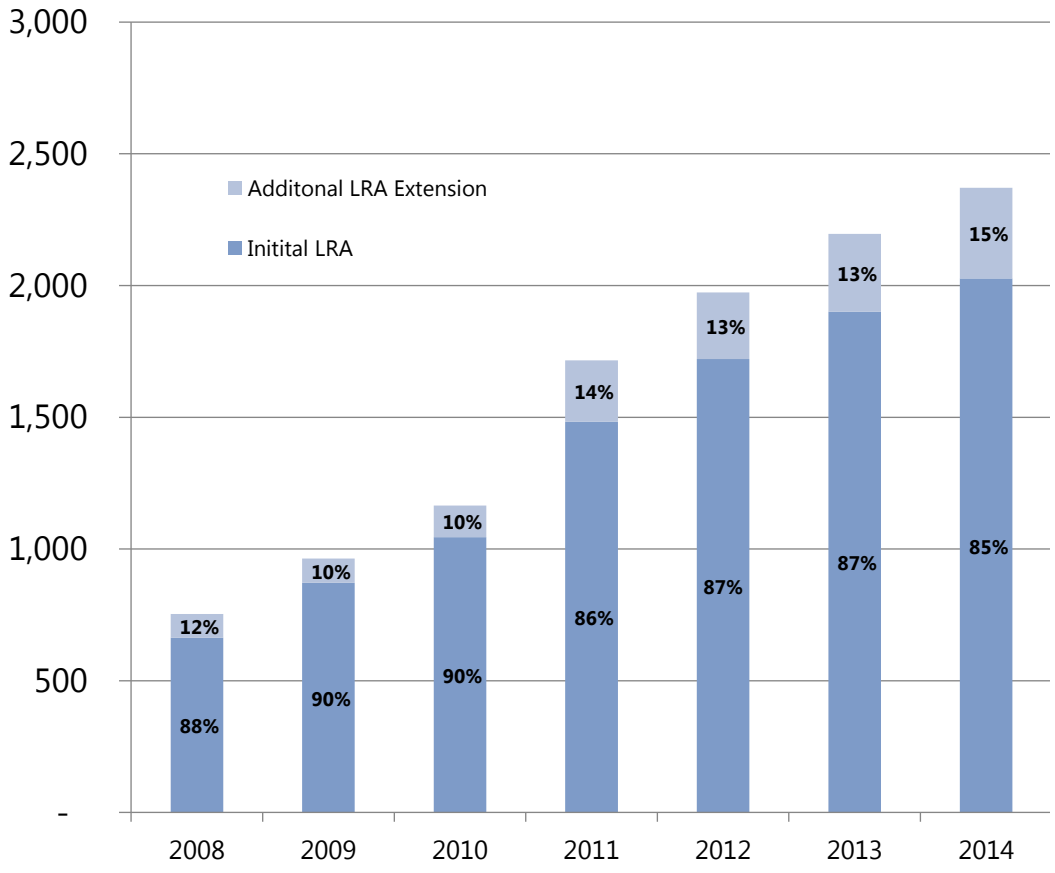
The second half of our online survey covered questions related to the LRA process in each court jurisdiction.

Q: The court in your jurisdiction uses less restrictive alternatives to detention (LRAs)...

When asked about the frequency of LRA use, 43% stated they were used "about the right amount," and 19% responded LRAs "could be used more often." In many cases, respondents believed that an outpatient LRA order provided a measure of accountability that ensured patients followed the conditions of their treatment plan and maintained regular engagement with caseworkers and therapists.

Exhibit 7

Total Less Restrictive Orders for Treatment by Year



Q: What kinds of cases are suitable for an LRA?

LRAs are issued for different reasons depending on the individual case and input from the patient, the treatment team, legal counsel, and the judge or commissioner. We included a survey question about the kinds of cases that the survey respondents believe are suitable for an LRA.

Survey respondents reported that the most suitable cases for an LRA are when the patient is likely to follow the treatment plan. Another common response was that an LRA is appropriate in cases when the patient has family or community support and resources available upon release.

Q: Under what circumstance(s) should an LRA not be pursued?

Survey respondents reported that LRAs should not be pursued when the likelihood of violence or danger continues to be present. Other common responses were that LRAs should not be pursued when the patient clearly has no intention of following the court order, the patient lacks functioning or skills to remain in compliance, or the patient has limited access to services. Several respondents noted that lack of stable housing or homelessness may make it difficult for the individual to remain compliant with the terms of his/her treatment orders.

Q: How well do inpatient treatment teams collaborate with outpatient providers to determine whether an LRA should be recommended to the court?

Based on multiple interviews conducted for this project, we heard that judicial officials are likely to direct that the outpatient treatment plan developed prior to release from the hospital be implemented.[18] These plans must be carried out by community outpatient clinic staff or another outpatient treatment provider.

We asked survey respondents to rate the degree of collaboration between inpatient treatment teams and outpatient providers in developing and overseeing the progress for an outpatient order. The responses are as follows:

- 18% responded "not well"
- 30% responded "somewhat not well"
- 31% responded "well"
- 7% responded "somewhat well"
- 14% responded "very well"

Thus, roughly half (52%) of survey respondents report that collaboration is present, but others (48%) report that there is not always consistent consultation when developing and carrying out an LRA treatment order.

As shown in the next section, the outpatient providers are responsible for ongoing support and oversight for the LRA. Several interviewees stated that collaboration between these treatment providers and courts is necessary to maintain treatment goals and monitor patient outcomes.

[18] See acknowledgements for the list of organizations we met with for background informational interviews.

IV. LRA Treatment Oversight and Monitoring

Washington's ITA laws require that court-ordered mental health treatment services take place in a setting less restrictive than the hospital whenever in the best interest of the patient and others.[19] These less restrictive orders typically occur under the supervision of an outpatient treatment provider at a community mental health clinic.

An outpatient LRA order outlines certain conditions the patient must meet while receiving court-supervised treatment. These conditions may include: attending regular appointments with a caseworker or therapist, taking medications as prescribed, agreeing to drug and alcohol testing, and developing an individual crisis plan.

The outpatient plan approved by a court must specify a mental health provider who will oversee compliance and monitor progress toward the individual's treatment goals. Agencies that are certified to provide court-ordered mental health treatment services must provide, at a minimum:

- psychiatric medication management services once every seven days following hospital release or once every 30 days without a recent inpatient admission, and
- a periodic evaluation at least once every 30 days.[20]

Information about evaluation and monitoring for court-ordered treatment is currently not available from state administrative data systems. Consequently, we cannot determine the intensity or frequency of provider contact with individuals under an LRA. Therefore, we used our survey to learn about this topic.

Q: How well are LRA orders monitored in your jurisdiction?

Of the respondents included in our survey, 57% said the LRAs were monitored "well" or "very well." The remaining 43% responded that LRAs were monitored "somewhat not well" and "not well."

Q: What improvements would you suggest for the oversight and enforcement of LRA orders?

When we surveyed civil commitment practitioners about what improvements they would suggest for the oversight and enforcement of LRA orders, the most frequent response (38% of responses to the question) was to increase staffing levels so more caseworkers are available to make contact with patients after they are released on outpatient orders. The second most common survey response (14%) stated that there is a need for additional training and education for treatment providers and legal practitioners regarding the use of LRAs in the commitment process.

[19] RCW 71.05.010.
[20] WAC 388-877A-0195.

According to certification guidelines for LRA treatment providers, if the period of court-ordered treatment has concluded, the provider assessment should indicate a reason for either 1) allowing the less restrictive court order to expire, or 2) requesting a petition for an additional period (extension) of court-ordered treatment.[21]

As Exhibit 7 (page 11) shows, 352 commitment cases in 2014 included an additional LRA extension—15% of all LRA cases ordered that year. Exhibit A4 in the Technical Appendix includes LRA activity by court jurisdiction for 2014. Compared to the statewide average, Benton, Pierce, King, and Whatcom court jurisdictions use LRA extensions more frequently.

Revocation of LRA

Until recently, Washington's ITA statute did not explicitly specify actions that should be taken in response to noncompliance with an LRA order. In 2015, certified treatment providers and DMHPs were authorized by statute to take the following steps to enforce compliance with an LRA:

- counseling, advising, or admonishing the person as to their rights and responsibilities under a court order, and offering appropriate incentives to motivate compliance;
- increasing the intensity of outpatient services provided to the person;
- requesting a court hearing for review and modification of the LRA order—a county prosecutor must assist in requesting this hearing and issuing the appropriate summons;
- requesting transportation of the person to the agency or facility monitoring the LRA order or to a triage facility, crisis stabilization unit, emergency department, or E&T facility by a peace officer or DMHP for up to 12 hours for the purpose of an evaluation to determine whether modification, revocation, or commitment proceedings are appropriate to stabilize the person and prevent decompensation, deterioration, or physical harm; and
- requesting detention to an E&T facility and initiating revocation proceedings as provided in current law.[22]

It is important to note that noncompliance by itself does not result in a subsequent involuntary hospital commitment or a revocation of the LRA. If a patient does not follow the terms outlined in an LRA, a court may revoke the order and the patient could return to the hospital if he or she continues to meet the same gravely disabled criteria and/or poses a danger to self or others.

While a judge may revoke a treatment order for noncompliance, these orders are sealed and the reasons for reversing these orders are not available in court records.[23] Therefore, we could not examine the specific grounds given for revoking a mental health treatment order. However, we did analyze the percentage of orders that were revoked and asked survey respondents about situations in which court involvement was necessary.

[21] WAC 388-877A-0195(8).

[22] RCW 71.05.590.

[23] RCW 70.02.230.

Q: Describe the circumstances where the revocation of an LRA would be appropriate.

Based on a report made from a treatment provider, family member, or other interested party, a DMHP can conduct a new investigation to determine if a person with an LRA order meets legal detention criteria. If the DMHP determines the person poses a danger to self or others, a new 72-hour evaluation and detention could be ordered pending a revocation hearing, and the same type of initial detention process is started over again.

A majority of survey respondents reported that it is appropriate to seek a court revocation when the patient has decompensated (the patient's symptoms have grown more acute) and failed to follow the orders of the LRA.

As Exhibit 8 shows, in 2014, 15% of the cases with an initial LRA order had a subsequent revocation.[24] This noncompliance rate is consistent with research from other states that shows between 5%-20% of patients fail to meet terms of an assisted outpatient treatment order.[25] Assisted outpatient treatment (AOT) refers to court-ordered involuntary treatment policies for individuals with serious mental illness who meet certain legal criteria, such as a history of noncompliance. In 2015, Washington State implemented new commitment criteria for persons with prior psychiatric hospitalizations who may be "in need of assisted outpatient mental health treatment."[26]

National research related to the effectiveness of assisted outpatient treatment and other alternative treatments to involuntary hospital commitments is discussed in the next section.

Exhibit 8

Revocation Filing Rate for Less Restrictive Treatment Orders

Year	Number of initial LRA orders	Number (percent) of initial LRA orders revoked
2008	663	131 (20%)
2009	872	132 (15%)
2010	1,045	140 (13%)
2011	1,483	234 (16%)
2012	1,721	227 (13%)
2013	1,901	277 (15%)
2014	2,027	294 (15%)

[24] For revocation filings by court jurisdiction see Exhibit A5 in the Technical Appendix.
[25] Burley & Morris, (2015), pg. 9.
[26] Engrossed Second Substitute House Bill 1450, Chapter 250, Laws of 2015, effective date 4/1/2016.

V. Research Findings on Mental Health Treatment Interventions

The legislative assignment for this study directed WSIPP to complete "a systematic review of the research literature on the effectiveness of alternatives to involuntary hospitalizations in reducing violence and re-hospitalizations."[27]

When WSIPP is asked to identify "what works" and "what does not work" on a given topic, we begin by locating all of the studies we can find from around the United States and elsewhere. We look for research studies with strong evaluation designs and exclude studies with weak research designs.[28]

We use three steps to identify evidence-based programs.

First, we use a statistical technique called meta-analysis to combine findings from multiple studies to obtain an estimate of the average effect of a program.

Second, we calculate whether the benefits of a program exceed its costs. This economic test demonstrates whether the lifetime monetary value of the program's benefits at least equals the cost of the program.

Third, we estimate the risk of investing in a program by testing the sensitivity and uncertainty of our modeling assumptions. Risk analysis provides an indication of the chances that, when key estimates are varied, the benefits will consistently exceed costs.

For this systematic review of community-based interventions, we identified seven different programs that have been evaluated with respect to crime outcomes and eleven programs with studies with psychiatric hospitalization outcomes. A description for each of these programs and our meta-analytic and benefit-cost results are displayed in Section A. III. of the Technical Appendix.

Three programs had statistically significant effects on reducing psychiatric hospitalization—Assertive Community Treatment, Mobile Crisis Response and Supported Housing for chronically homeless adults.[29] One program, Assisted Outpatient Treatment, was significantly associated with a small *increase* in hospitalization. This finding is consistent with those of other meta-analyses of this program.[30]

[27] Engrossed Second Substitute Senate Bill 5649, Chapter 269, Laws of 2015.

[28] For detailed information on WSIPP's meta-analytic process, please see WSIPP Technical Documentation http://www.wsipp.wa.gov/TechnicalDocumentation/WsippBenefitCostTechnicalDocumentation.pdf

[29] For more information on the criteria used in our analysis, please see Section A. III. of the Technical Appendix.

[30] Kisely, S.R., & Campbell LA. (2014). Compulsory community and involuntary outpatient treatment for people with severe mental disorders. *Cochrane Database of Systematic Reviews, 12*. Art. No.: CD004408. DOI: 10.1002/14651858.CD004408.pub4. Authors conclude, "Compulsory Treatment Orders (CTOs) may not lead to significant differences in readmission, social functioning, or symptomatology, compared with standard care. Their use should be kept under review." See also, Churchill, R., Owen, G., Singh, S., & Hotopf, M. (2007). *International experiences of using community treatment orders*. London: Institute of Psychiatry.

Only one program, Supported Housing, had a near-significant effect on reducing crime. Our benefit-cost analyses examined crime and hospitalization outcomes, as well as other outcomes that could affect the economic evaluation of the program. Overall, we estimate that benefits exceed costs at least 50% of the time for the following programs:[31]

- Cognitive Behavioral Therapy (CBT) for schizophrenia/psychosis,
- Individual Placement and Support,
- Mobile Crisis Response, and
- Primary care in behavioral health settings.

In the coming year, updated results on the economic benefits of research-based findings for adult mental health will be included on the WSIPP website.[32]

[31] None of the program's benefits exceeded costs 75% of the time.
[32] http://www.wsipp.wa.gov/BenefitCost?topicId=8

Technical Appendix

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Appendix

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Exhibit A1

ITA Investigation Outcomes by Court Jurisdiction & County, 2014

Court jurisdiction	County of investigation	Total investigations	Inpatient detention	Referred for voluntary services	Not detained or referred	Under less restrictive alternative (LRA)
Benton		**972**	**427**	**352**	**132**	**61**
	Benton	410	279	96		35
	Columbia	73	7	42	24	
	Franklin	147	82	43		22
	Walla Walla	342	59	171	108	4
Clark	Clark	**1,017**	**247**	**400**	**352**	**18**
	Clark	1017	247	400	352	18
	Skamania	n/r	n/r	n/r	n/r	n/r
Cowlitz		**566**	**259**	**112**	**133**	**62**
	Cowlitz	555	252	109	132	62
	Wahkiakum	11	7	3	1	
King	**King**	**6,215**	**3,330**	**1,450**	**836**	**599**
Peninsula		**1,468**	**455**	**703**	**198**	**112**
	Kitsap	978	307	491	78	102
	Clallam	346	100	170	68	8
	Jefferson	144	48	42	52	2
Pierce	**Pierce**	**1,537**	**628**	**753**	**37**	**119**
Skagit		**1,036**	**294**	**504**	**222**	**16**
	Island	257	68	146	41	2
	San Juan	45	6	26	11	2
	Skagit	734	220	332	170	12
Snohomish	**Snohomish**	**1,743**	**716**	**447**	**444**	**136**
Spokane		**2,750**	**1,413**	**785**	**278**	**274**

Court jurisdiction	County of investigation	Total investigations	Inpatient detention	Referred for voluntary services	Not detained or referred	Under less restrictive alternative (LRA)
	Adams	65	14	49	2	
	Asotin	100	16	56	26	2
	Chelan	870	148	529	175	18
	Douglas					
	Garfield					
	Ferry	15	8	7		
	Garfield	10	2	5	3	
	Grant	51	32	15	2	2
	Lincoln					
	Okanogan	96	82	8	2	4
	Pend Oreille	117	10	89	18	
	Spokane	1,355	1,064	2	43	246
	Stevens	39	17	15	7	
	Whitman	32	20	10		2
Thurston/Mason		**2,250**	**781**	**658**	**768**	**43**
	Grays Harbor	234	228	3		3
	Lewis	177	53	103	19	2
	Mason	142	41	45	55	1
	Pacific	98	48	22	26	2
	Thurston	1,599	411	485	668	35
Whatcom	**Whatcom**	**1,158**	**393**	**499**	**196**	**70**
Yakima	**Yakima**	**267**	**250**			**17**
	Yakima	223	207			16
	Kittitas	34	33			1
	Klickitat	10	10			
State total		**20,979**	**9,193**	**6,663**	**3,596**	**1,527**

Source: Washington State Division of Behavioral Health and Recovery (DBHR) Service Encounter Reporting Database.

Exhibit A2

ITA Treatment Petition Outcomes by Court Jurisdiction, 2014

Court	Total initial petitions for detention	Commitment		Total commitments (a+b)
		Court order (a)	Agreed order (b)	
King	3,593	2,338 (65%)	493 (14%)	2,831 (79%)
Spokane	1,468	1,002 (68%)	217 (15%)	1,219 (83%)
Yakima	763	116 (15%)	6 (1%)	122 (16%)
Snohomish	759	478 (63%)	108 (14%)	586 (77%)
Pierce	633	438 (69%)	184 (29%)	622 (98%)
Thurston	434	219 (50%)	211 (49%)	430 (99%)
Whatcom	419	257 (61%)	161 (38%)	418 (100%)
Benton	344	191 (56%)	2 (1%)	193 (56%)
Kitsap	260	100 (38%)	109 (42%)	209 (80%)
Cowlitz	242	162 (67%)	2 (1%)	164 (68%)
Clark	240	136 (57%)	28 (12%)	164 (68%)
Other [a]	486	21 (4%)	341 (70%)	362 (74%)
Total	**9,641**	**5,458 (57%)**	**1,862 (19%)**	**7,320 (76%)**

Source: Washington State Administrative Office of the Courts (AOC) Judicial Information System (JIS) and Pierce County Clerk's Office.

[a] Counties include: Skagit, Cowlitz, Okanogan, Chelan, Island, Jefferson, Lewis, Asotin, Clallam, Walla Walla, Whitman, Grant, and Grays Harbor.

Exhibit A3

Involuntary Treatment Commitment Hearing Orders, 2014

Court	Petition for 14-day inpatient commitment, no order	Order for 14-day inpatient commitment, no LRA order	Order for 14-day inpatient commitment, followed by LRA order	LRA order following initial petition (no inpatient commitment)	Total hearings	Total (percent LRA orders)
King	1,114	1,211	806	303	3,591	1,109 (31%)
Pierce	209	887	141	7	1,467	148 (10%)
Spokane	260	157	66	361	988	427 (43%)
Yakima	447	104	55	62	763	117 (15%)
Snohomish	94	243	185	47	758	232 (31%)
Thurston	18	148	78	5	434	83 (19%)
Whatcom	77	119	83	53	420	136 (32%)
Benton	3	117	144	18	344	162 (47%)
Kitsap	25	161	69	1	260	70 (27%)
Cowlitz	6	47	85	28	243	113 (47%)
Clark	31	134	33	1	239	34 (14%)
Skagit	12	44	20	23	184	43 (23%)
Other Counties	22	49	2	10	290	12 (4%)
Total	**2,318**	**3,421**	**1,767**	**919**	**9,981**	**2,686 (27%)**

Source: Washington State Administrative Office of the Courts (AOC) Judicial Information System (JIS) and Pierce County Clerk's Office.

[a] Counties include: Skagit, Cowlitz, Okanogan, Chelan, Island, Jefferson, Lewis, Asotin, Clallam, Walla Walla, Whitman, Grant, and Grays Harbor.

Exhibit A4

Less Restrictive Order Extensions by Court Jurisdiction, 2014

Court jurisdiction	Initial LRA order	LRA extension	Total LRA orders
King	905	204 (18%)	1,109
Pierce	93	27(23%)	120
Spokane	126	22 (15%)	148
Yakima	111	6 (5%)	117
Snohomish	216	16 (7%)	232
Thurston	83	0 (0%)	83
Whatcom	110	26 (19%)	136
Benton	124	38 (23%)	162
Kitsap	70	0 (0%)	70
Cowlitz	106	7 (6%)	113
Clark	29	5 (15%)	34
Skagit	42	1 (2%)	43
Other Counties [a]	12	0 (0%)	12
Total	**2,027**	**352 (15%)**	**2,379**

Source: Washington State Administrative Office of the Courts (AOC) Judicial Information System (JIS) and Pierce County Clerk's Office.

[a] Counties include: Skagit, Cowlitz, Okanogan, Chelan, Island, Jefferson, Lewis, Asotin, Clallam, Walla Walla, Whitman, Grant, and Grays Harbor.

Exhibit A5

Revocation Filings for Less Restrictive Orders by Court Jurisdiction, 2014

Court	Revocation filings (percent)	Total initial LRA orders
King	114 (13%)	905
Pierce	17 (18%)	93
Snohomish	31 (14%)	216
Spokane	31 (25%)	126
Benton	8 (6%)	124
Yakima	17 (15%)	111
Cowlitz	24 (23%)	106
Whatcom	15 (14%)	110
Other Counties [a]	37 (16%)	236
Total	**294 (15%)**	**2,027**

Source: Washington State Administrative Office of the Courts (AOC) Judicial Information System (JIS) and Pierce County Clerk's Office.

[a] Counties include: Thurston, Kitsap, Clark, and Skagit.

A. II. WSIPP Online Survey of Civil Commitment Practitioners

WSIPP researchers designed an online survey specifically to help answer questions from E2SSB 5649. Section 15(1)(a)(ii) of E2SSB 5649 instructs WSIPP to obtain "feedback from judicial officials, prosecutors, public defenders, and mental health professionals." Informational background interviews were held with representatives from the mental health practitioners outlined in the legislative assignment. Based on these meetings, WSIPP staff developed questions about the ITA Commitment Process as it relates to non-emergent petitions and LRA orders.

WSIPP's online survey was distributed to officials representing the aforementioned stakeholder groups. Specifically, the survey was distributed to mental health judges and commissioners from Washington State Courts, the Washington Association of Prosecuting Attorneys, the Washington Defender Association, the Washington Association of Designated Mental Health Professionals, and the Washington Community Mental Health Council. We cannot calculate a response rate for the survey since we have no way of knowing how many people received the survey. We received 170 responses from an anonymous and voluntary online survey administered between September 28 and October 7, 2015.

A copy of the online survey is included, beginning on the next page.

A. III. Meta-Analysis on Mental Health Treatment Interventions

The results of our review are presented in Exhibits A6 and A7 and include the following four pieces of information:

1. The number of studies for each program that met review criteria.
2. The number of total individuals included in the combined studies.
3. A calculated effect size that provides a comparable measure of the strength and direction of the program's impact on the measured outcome.
4. The p-value, or statistical significance of the effect size. . It provides an estimate of how frequently an outcome could occur by chance. Generally, p-values less than 0.05—less than 5% of the time—indicate that the measured effect was statistically significant.

Effect sizes are statistical summary measures that can be used to assess the magnitude differences between groups. An effect size of 0 or an effect that was statistically insignificant means there is no program effect on the outcome. As Exhibit A6 indicates, only Supported Housing had a measurable effect on crime-related outcomes.

Exhibit A6

Programs for Persons with SMI where Evaluations Measured Crime Outcome

Program/intervention	Studies	Subjects in tx group	ES	p-value
Assertive Community Treatment (ACT)	8	934	-0.03	0.64
Forensic Assertive Community Treatment (FACT)	1	72	-0.11	0.52
Illness Management and Recovery (IMR)	1	49	0.03	0.91
Mobile Crisis Response	1	73	-0.47	0.20
Peer support: Substitution of a peer specialist	2	81	0.26	0.25
Supported housing for chronically homeless adults	**8**	**3,833**	**-0.08**	**0.08**
Assisted Outpatient Treatment	2	172	0.01	0.94

*For citations used in the meta-analysis, please see Section A. IV. of the Technical Appendix.

Exhibit A7 includes findings for program-related effects on psychiatric hospitalizations. We find that three programs significantly reduce psychiatric hospitalization: Assertive Community Treatment (ACT), Mobile Crisis Response, and Supported Housing. One program, Assisted Outpatient Treatment, was significantly associated with a small increase in hospitalization.[33] This finding is not inconsistent with those of others.[34]

Exhibit A7

Programs for Persons with SMI where Evaluations Measured Psychiatric Hospitalizations

Program/intervention	Studies	Subjects in tx group	ES	p-value
Assertive Community Treatment (ACT)	**22**	**2,294**	**-0.18**	**0.02**
CBT for schizophrenia/psychosis	16	832	-0.12	0.24
Forensic Assertive Community Treatment (FACT)	1	72	-0.21	0.23
Illness Management and Recovery (IMR)	3	112	-0.10	0.62
Individual Placement and Support (IPS)	2	222	-0.00	0.99
Mobile Crisis Response	**2**	**1,173**	**-0.42**	**0.05**
Peer support: Substitution of a peer specialist	4	208	0.02	0.90
Peer support: Addition of a peer specialist	7	2,191	-0.06	0.60
Primary care in behavioral health settings (integrated)	7	2,191	-0.06	0.60
Supported housing for chronically homeless adults	**4**	**2,727**	**-0.06**	**0.04**
Assisted Outpatient Treatment	3	365	-0.01	0.95

*For citation used in the meta-analysis, please see Section A. IV. of the Technical Appendix.

The results of WSIPP's benefit-cost analyses of these programs are listed in Exhibit A8. The analysis uses effect sizes from the meta-analysis to estimate the lifetime benefits of the program compared with the cost to implement the program. We calculate the benefit-to cost ratio and, using Monte Carlo sampling, estimate the likelihood that economic benefits to the individual, the state, and society will exceed the cost of the program.[35]

[33] For more information on the criteria used in our analysis, please see Section A. III. of the Technical Appendix.
[34] Kisely, & Campbell, (2014).
[35] More information for each of these programs can be viewed at http://www.wsipp.wa.gov/BenefitCost?topicId=8

Exhibit A8

Benefit-Cost Analysis of Programs for Persons with SMI
where Evaluations Measured Crime and/or Psychiatric Hospitalizations

Program/intervention	Benefit-cost ratio	Chances benefits will exceed costs
Assertive Community Treatment (ACT)	($0.44)	12%
CBT for schizophrenia/psychosis	$9.80	60%
Forensic Assertive Community Treatment (FACT)	($0.40)	0%
Illness Management and Recovery (IMR)	($0.26)	31%
Individual Placement and Support (IPS)	$1.97	63%
Mobile Crisis Response	$1.42	56%
Peer support: Substitution of a peer specialist	($6,602)	33%
Peer support: Addition of a peer specialist	$0.20	14%
Primary care in behavioral health settings (integrated)	$3.92	54%
Supported housing for chronically homeless adults	($0.39)	0%
Assisted Outpatient Treatment	N/A[1]	N/A

[1] We are unable to determine the cost of the program at this time.

A. IV. Citations Used in the Meta-Analysis—Evaluations Measuring Crime Outcomes

Supported Housing—provides permanent supportive housing to chronically homeless single adults. Most of the studies reviewed here used the Housing First model which provides independent apartments with no specific requirements for abstinence or treatment. Programs typically provide intensive case management and services. Housing is in independent apartments; participants hold the lease but receive subsidies to pay rent.

Basu, A., Kee, R., Sadowski, L.S., & Buchanan, D. (2012). Comparative cost analysis of housing and case management program for chronically ill homeless adults compared to usual care. *Health Services Research, 47,* 523-543.

Culhane, D.P., Metraux, S., & Hadley, T. (2002). Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. *Housing Policy Debate, 13*(1), 107-163.

Gilmer, T.P., Stefancic, A., Ettner, S.L., Manning, W.G., & Tsemberis, S. (2010). Effect of full-service partnerships on homelessness, use and costs of mental health services, and quality of life among adults with serious mental illness. *Archives of General Psychiatry, 67(6)*, 645-52.

Johnson, G., Kuehnle, D., Parkinson, S., Sesa, S., Tseng, Y. (2014). *Resolving Long-Term Homelessnes: A Randomized Controled Trial Examining the 36 Month Costs, Benefits, and Social Outcomes from the Journey to Social Inclusion Pilot Program.* Sacred Heart Mission, St. Kilda.

Larimer, M.E., Malone, D.K., Garner, M.D., Atkins, D.C., Burlingham, B., Lonczak, H.S., et al. (2009). Health care and public service use and costs before and after provision of housing for chronically homeless persons with severe alcohol problems. *JAMA, 301(13)*, 1349-1357.

Mares, A., Rosenheck, R.A. (2007) *HUD/HHS/VA Collaborative to Help End Chronic Homelessness: National Performance Outcomes Assessment Preliminary Client Outcomes Report.* West Haven, CT: VA Northeast Program Evaluation Center.

Rosenheck, R., Kasprow, W., Frisman, L., & Liu-Mares, W. (2003). Cost-effectiveness of supported housing for homeless persons with mental illness. *Archives of General Psychiatry, 60*(9), 940-951.

Srebnik, D., Connor, T., & Sylla, L. (2013). A pilot study of the impact of housing first-supported housing for intensive users of medical hospitalization and sobering services. *American Journal of Public Health, 103(2)*, 316-21.

Assisted Outpatient Treatment (involuntary)—a legal alternative to involuntary inpatient commitment whereby the court may order the patient to participate in outpatient care. In the studies of AOT included in our analysis, patients could receive an AOT order if there was evidence that the person might not follow-up with community outpatient care. In some locations, the AOT order allowed early release from the psychiatric hospital.

Steadman, H.J., Gounis, K., Dennis, D., Hopper, K., Roche, B., Swartz, M., & Robbins, P.C. (2001). Assessing the New York City Involuntary Outpatient Treatment Program. *Psychiatric Services, 52,* 11, 1533.

Swanson, J.W. (2001). Can involuntary outpatient commitment reduce arrests among persons with severe mental illness?. *Violence & Abuse Abstracts,* 7(4), 259-371.

Peer support: Addition of a peer specialist to the treatment team—programs examined in this analysis compared treatment teams with a peer specialist to treatment teams without a peer specialist. The treatment teams in this analysis provided services to individuals with serious mental illness or individuals receiving VA services for a psychiatric diagnosis.

Felton, C.J., Stastny, P., Shern, D.L., Blanch, A., Donahue, S.A., Knight, E., & Brown, C. (1995). Consumers as peer specialists on intensive case management teams: Impact on client outcomes. *Psychiatric Services, 46*(10), 1037-1044.

Peer support: Substitution of a peer specialist for a non-peer on the treatment team—the programs examined in this analysis compared treatment teams with a peer specialist to treatment teams with a non-peer in a similar role.

Felton, C. J., Stastny, P., Shern, D. L., Blanch, A., Donahue, S. A., Knight, E., & Brown, C. (1995). Consumers as peer specialists on intensive case management teams: Impact on client outcomes. *Psychiatric Services, 46*(10), 1037-1044.

Solomon, P., & Draine, J. (1995). The efficacy of a consumer case management team: 2-year outcomes of a randomized trial. *Journal of Mental Health Administration*, 22(2), 135-146.

Mobile Crisis Response—two types of mobile crisis interventions were included in this analysis: an interdisciplinary team who was dispatched after individuals called a mental health hotline and a 911 response team staffed by police and psychiatric nurses

Scott, R.L. (2000). Evaluation of a mobile crisis program: effectiveness, efficiency, and consumer satisfaction. *Psychiatric Services, 51*(9), 1153-1156.

Illness Management and Recovery (IMR) —a 40-hour curriculum for individuals with severe mental illness which addresses recovery strategies and information about serious mental illness. The evaluations in this analysis include data from programs where IMR was delivered to individuals and programs where IMR was delivered to a group.

Salyers, M.P., McGuire, A.B., Rollins, A.L., Bond, G.R., Mueser, K.T., & Macy, V.R. (2010). Integrating assertive community treatment and illness management and recovery for consumers with severe mental illness. *Community Mental Health Journal, 46*(4), 319-329.

Forensic Assertive Community Treatment—adaptation of Assertive Community Treatment (ACT) for individuals with involvement in the criminal justice system. In this analysis the study population included individuals with serious mental illness who were identified as candidates for FACT in jail.

Cusack, K.J., Morrissey, J.P., Cuddeback, G.S., Prins, A., & Williams, D.M. (2010). Criminal justice involvement, behavioral health service use, and costs of forensic assertive community treatment: a randomized trial. *Community Mental Health Journal, 46*(4), 356-363.

Assertive Community Treatment—treatment and case management approach that includes the following key elements: a multidisciplinary team that includes a medication prescriber, direct service provided by team members, caseloads that are shared between team members, services provided in locations convenient for the patient, low patient-to-staff ratios. The studies reviewed in this analysis compared ACT to treatment as usual or other forms of case management.

Bond, G.R., Witheridge, T.F., Dincin, J., Wasmer, D., Webb, J., & DeGraaf-Kaser, R. (1990). Assertive community treatment for frequent users of psychiatric hospitals in a large city: a controlled study. *American Journal of Community Psychology, 18*(6), 865-891.

Clarke, G.N., Herinckx, H.A., Kinney, R.F., Paulson, R.I., Cutler, D.L., Lewis, K., & Oxman, E. (2000). Psychiatric hospitalizations, arrests, emergency room visits, and homelessness of clients with serious and persistent mental illness: findings from a randomized trial of two ACT programs vs. usual care. *Mental Health Services Research, 2*(3),155-164.

Killaspy, H., Bebbington, P., Blizard, R., Johnson, S., Nolan, F., Pilling, S., & King, M. (2006). The REACT study: randomised evaluation of assertive community treatment in north London. *British Medical Journal,* 7545, 815-818.

Korr, W.S., & Joseph, A. (1995). Housing the Homeless Mentally Ill: Findings from Chicago. *Journal of Social Service Research, 21*(1), 53-68.

Lehman, A.F., Dixon, L.B., Kernan, E., DeForge, B.R., & Postrado, L.T. (1997). A randomized trial of assertive community treatment for homeless persons with severe mental illness. *Archives of General Psychiatry, 54*(11), 1038-1043.

Morrissey, J.P., Domino, M.E., & Cuddeback, G.S. (2013). Assessing the effectiveness of recovery-oriented ACT in reducing state psychiatric hospital use. *Psychiatric Services, 64*(4), 303-311.

Rosenheck, R., Kasprow, W., Frisman, L., & Liu-Mares, W. (2003). Cost-effectiveness of supported housing for homeless persons with mental illness. *Archives of General Psychiatry, 60*(9), 940-951.

Test, M.A., Knoedler, W.H., Allness, D.J., et al. (1991). Long-term community care through an assertive continuous treatment team,. In C.T. Schultz (Ed.), Advances in Neuropsychiatry and Psychopharmacology: Schizophrenia Research, Vol. 1 (pp.239-246).

A. V. Citations Used in the Meta-Analysis where Evaluations Measured Psychiatric Hospitalizations

Supported Housing—see A.III.

Culhane, D.P., Metraux, S., & Hadley, T. (2002). Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. *Housing Policy Debate, 13*(1), 107-163.

Gulcur, L., Stefancic, A., Shinn, M., Tsemberis, S., & Fischer, S. (2003). Housing, hospitalization, and cost outcomes for homeless individuals with psychiatric disabilities participating in continuum of care and housing first programmes. *Journal of Community and Applied Social Psychology, 13(2)*, 171-186.

Johnson, G., Kuehnle, D., Parkinson, S., Sesa, S., Tseng, Y. (2012) *Resolving Long-Term Homelessnes: A Randomized Controled Trial Examining the 24 Month Costs, Benefits,and Social Outcomes from the Journey to Social Inclusion Pilot Program.* Sacred Heart Mission, St. Kilda.

Rosenheck, R., Kasprow, W., Frisman, L., & Liu-Mares, W. (2003). Cost-effectiveness of supported housing for homeless persons with mental illness. *Archives of General Psychiatry, 60*(9), 940-951.

Assisted Outpatient Treatment (involuntary)—see A.III.

Burns, T., Rugkåsa, J., Molodynski, A., Dawson, J., Yeeles, K., Vazquez-Montes, M., Voysey, M., ... Priebe, S. (2013). Community treatment orders for patients with psychosis (OCTET): a randomised controlled trial. *Lancet (london, England), 381*, 9878, 1627-33.

Castells-Aulet, L., Hernandez-Viadel, M., Jimenez-Marots, J., Canete-Nicolas, C., Bellido-Rodriguez. C., Calabuig-Crespo, R., Asensio-Pascual, P., Lera-Calatayud, G. (2014) Impact of involuntary out-patient commitment on reducing hospital services: 2-year follow-up. Psychiatric Bulletin *38, 1-4.*

Primary care in behavioral health settings - Behavioral health settings (mental health and substance abuse treatment centers) provide primary care for patients on site or nearby. This collection of studies was conducted at Veterans Administration facilities or facilities of Kaiser Permanente where patients might have more ready access to primary care than community-based treatment centers.

Druss, B.G., Rohrbaugh, R.M., Levinson, C.M., & Rosenheck, R.A. (2001). Integrated medical care for patients with serious psychiatric illness: a randomized trial. *Archives of General Psychiatry, 58,* 9, 861-8.

Peer support: Addition of a peer specialist to the treatment team—see A.III.

Craig, T., Doherty, I., Jamieson-Craig, R., Boocock, A., & Attafua, G. (2004). The consumer-employee as a member of a Mental Health Assertive Outreach Team. I. Clinical and social outcomes. *Journal of Mental Health, 13*(1), 59-69.

Felton, C.J., Stastny, P., Shern, D.L., Blanch, A., Donahue, S.A., Knight, E., & Brown, C. (1995). Consumers as peer specialists on intensive case management teams: Impact on client outcomes. *Psychiatric Services, 46*(10), 1037-1044.

Gordon, R.E., Edmunson, E., Bedell, J. & Goldstein, N. (1979). Reducing rehospitalization of state mental patients. *Journal of the Florida Medical Association, 66*(9), 927-933.

Landers, G.M., & Zhou, M. (2011). An analysis of relationships among peer support, psychiatric hospitalization, and crisis stabilization. *Community Mental Health Journal, 47*(1), 106-112.

Min, S.Y., Whitecraft, J., Rothbard, A.B., & Salzer, M.S. (2007). Peer support for persons with co-occurring disorders and community tenure: a survival analysis. *Psychiatric Rehabilitation Journal, 30*(3), 207-213.

Sledge, W.H., Lawless, M., Sells, D., Wieland, M., O'Connell, M.J., & Davidson, L. (2011). Effectiveness of peer support in reducing readmissions of persons with multiple psychiatric hospitalizations. *Psychiatric Services, 62*(5), 541-544.

Tracy, K., Burton, M., Nich, C., & Rounsaville, B. (2011). Utilizing Peer Mentorship to Engage High Recidivism Substance-Abusing Patients in Treatment. *The American Journal of Drug and Alcohol Abuse, 37*(6), 525-531.

Peer support: Substitution of a peer specialist for a non-peer on the treatment team—see A.III.

Clarke, G.N., Herinckx, H.A., Kinney, R.F., Paulson, R.I., Cutler, D.L., Lewis, K., & Oxman, E. (2000). Psychiatric hospitalizations, arrests, emergency room visits, and homelessness of clients with serious and persistent mental illness: findings from a randomized trial of two ACT programs vs. usual care. *Mental Health Services Research, 2*(3),155-164.

Felton, C.J., Stastny, P., Shern, D.L., Blanch, A., Donahue, S.A., Knight, E., & Brown, C. (1995). Consumers as peer specialists on intensive case management teams: Impact on client outcomes. *Psychiatric Services, 46*(10), 1037-1044.

Rivera, J.J., Sullivan, A.M., & Valenti, S.S. (2007). Adding consumer-providers to intensive case management: Does it improve outcome?. *Psychiatric Services 58*(6), 802-809.

Solomon, P. & Draine, J. (1995). The efficacy of a consumer case management team: 2-year outcomes of a randomized trial. *Journal of Mental Health Administration*, 22(2), 135-146.

Mobile Crisis Response—see A.III.

Guo, S., Biegel, D.E., Johnsen, J.A., & Dyches, H. (2001). Assessing the impact of community-based mobile crisis services on preventing hospitalization. *Psychiatric Services, 52*(2), 223-228.

Scott, R.L. (2000). Evaluation of a mobile crisis program: effectiveness, efficiency, and consumer satisfaction. *Psychiatric Services, 51*(9), 1153-1156.

Individual Placement and Support—focuses on competitive employment, client interests, rapid job placement and ongoing support by employment specialists. In contrast, the comparison groups typically received vocational services that focused on building job skills before employment placement

Burns, T., Catty, J., Becker, T., Drake, R.E., Fioritti, A., Knapp, M., . . . Wiersma, D. (2007). The effectiveness of supported employment for people with severe mental illness: A randomised controlled trial. *The Lancet, 370*(9593), 1146-1152.

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