Economic Impacts of a Housing First Intervention for Homeless People with Mental Illness

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At Home / Chez Soi funding and project team

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Cameron Keller, M.C., Vice-President, Programs and Priorities, Mental Health Commission of Canada (formerly Jayne Barker)

Paula Goering, Ph.D., Center for Addictions and Mental Health and University of Toronto, National Research Lead

Approximately 40 investigators from across Canada

5 site coordinators, research coordinators and numerous research staff, persons with lived experience, service and housing providers.

Eric Latimer is lead investigator for the Montreal site and lead economist on the national research team.

Angela Ly is a M.Sc. Health administration student.

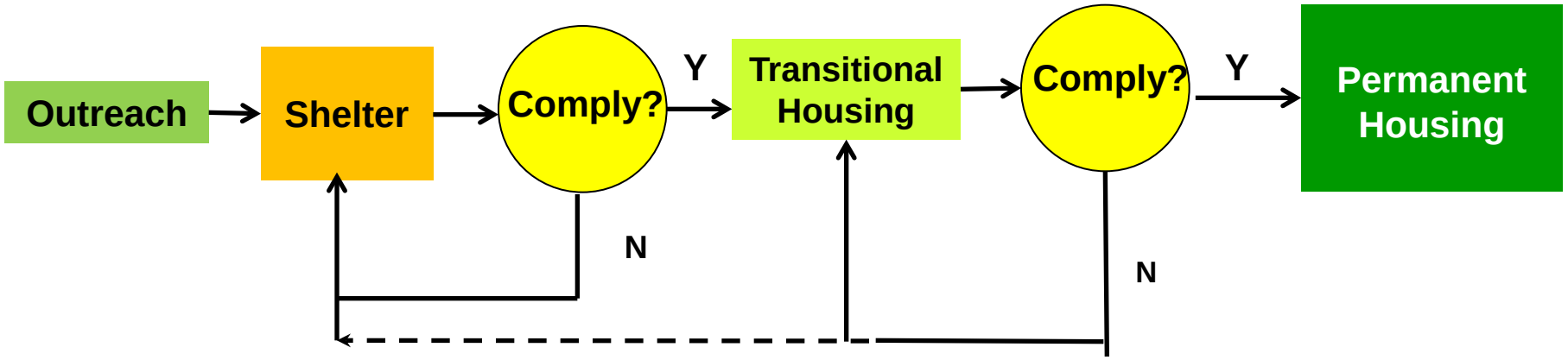
Daniel Rabouin is a senior analyst, **Guido Powell** a research assistant and **Yuxi Shi** was a research assistant.

Carol Adair, Paula Goering, Scott Velduizen and Craig Mitton have also contributed directly to the thinking surrounding these analyses

Homelessness in Canada

- It has been estimated that 150 000 canadians are homeless, and some suggest it is as high as 300,000 people (Echenberg H. & Jensen H., 2008).
- Within homeless population, 12-13% are heavy shelter users, accounting for more than half of shelter stays. (Aubry et al. 2010)
- Lifetime prevalence of mental illness: 67% (Goering et al. 2002)
- Substance abuse: 68% (Goering et al. 2002)

Continuum of care model



…+ non-integrated care

HOUSING FIRST: AN INTEGRATED ALTERNATIVE INVOLVING IMMEDIATE ACCESS TO HOUSING

PREVIOUS RESEARCH

- **Litterature review:** ACT + housing support generates better housing stability than alternatives (effect size 0.67 vs 0.47 for ACT alone) (Nelson, Aubry, Lafrance 2007)
- At least three published studies* report that supported housing interventions can lead to significant decreases in costs of:
  - shelter (43-92%)
  - hospital (29-80%)
  - prison (38-96%)
- In many cases, these decreases in costs have completely offset HF costs.
  - However costs typically measured in a very partial way; fairly small studies.

* Culhane et al. 2002, Larimer et al. 2009, Sadowsky et al. 2009, Srebnik et al. 2013

Prior studies – Housing First with scattered-site apartments

- **Pathways to Housing, New York:**
  1. **1993 to 1997, quasi-experimental study: - choice of independent apartments vs SROs or supervised housing**
     - **88% of HF clients housed compared to 47% for traditional step-wise programs**
  2. **1997 to 2001, RCT:**
     - **Over two years, less time homeless and more time stably housed**
     - **Perception of greater choice in housing**

Prior Studies – Streets to Homes

- **Toronto:**
  - **Single unpublished study gives « positive » results.**
- **No subsidies to apartments in Toronto's streets to homes (not built into program, nor housing allowances in Ontario):**
  - **What is evaluated in the At Home/Chez Soi project is a hybrid model.**

At Home/Chez Soi: Main objectives

- **Offer to nearly 1,300 homeless people with mental illness, in 5 Canadian cities, a Housing First intervention, most with scattered-site housing.**

- **Evaluate effectiveness and cost-effectiveness, including subgroup analyses**

Objectives of this presentation

- **Evaluate the impact of Housing First programs on participants' housing stability in Canada**

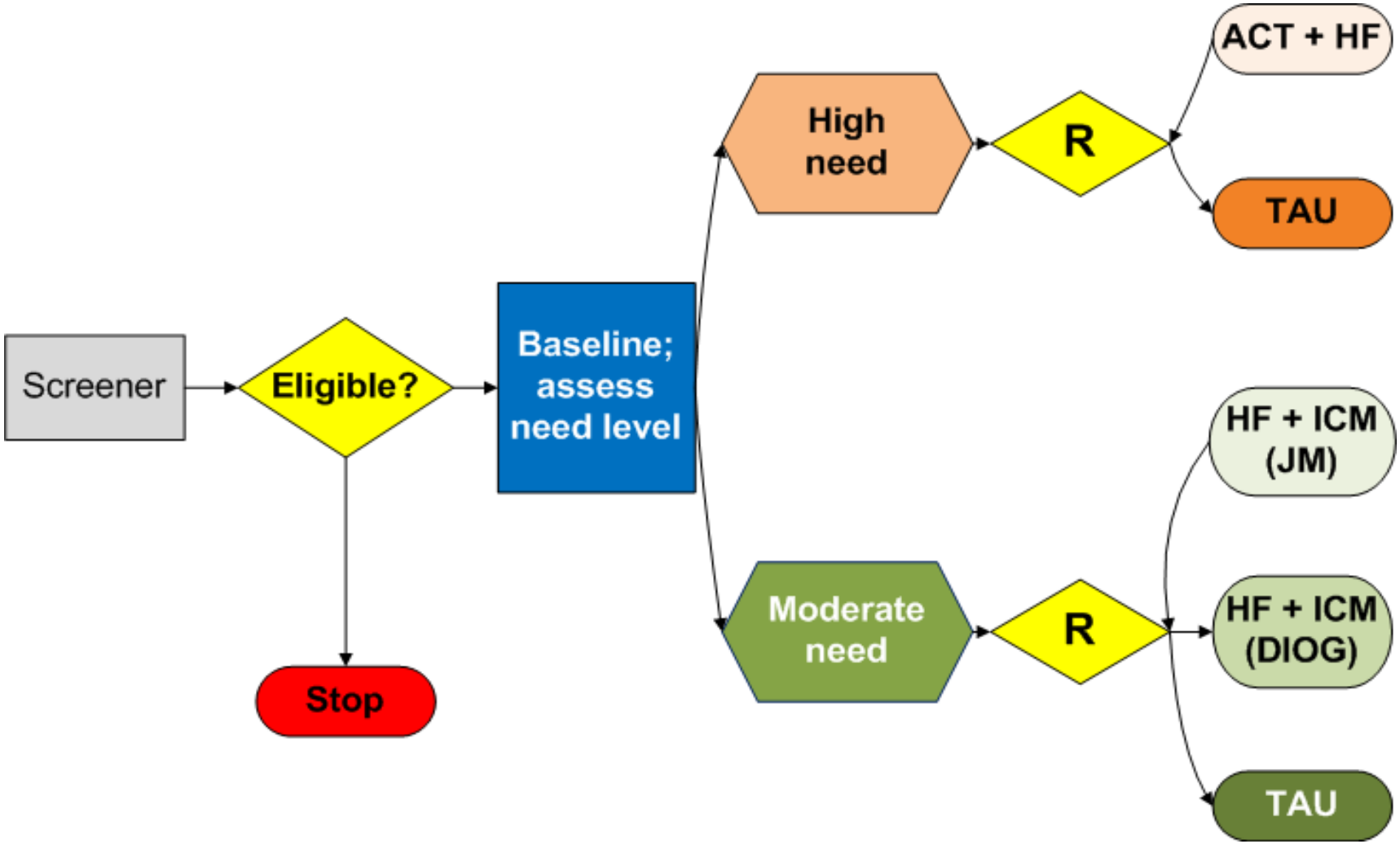
- **Evaluate the net impact of Housing First on average costs of health, social and justice service use.**

RANDOMIZED STUDY DESIGN
(N=2,148)

	HF	TAU	Total
High Need	469	481	950
Moderate Need	689	509	1198
	1158	990	2148

- **Inclusion criteria:** Homeless people with at least one of the main psychiatric diagnoses (psychotic disorder, mania/hypomania, mood disorder, major depression, post-traumatic stress disorder or panic disorder),
- **Exclusion:** People already housed and/or receiving intensive community treatment.
- **Need level:** Based on Multnomah community ability scale score (MCAS), Dx and other factors.

Example: Recruitment and randomization by need level in Montreal



Nature of interventions

Housing First:

- Almost exclusively subsidized apartments chosen by participants with support of housing specialists
- Care delivered by Assertive Community Treatment (ACT) or Intensive Case Management (ICM) teams according to participant need level

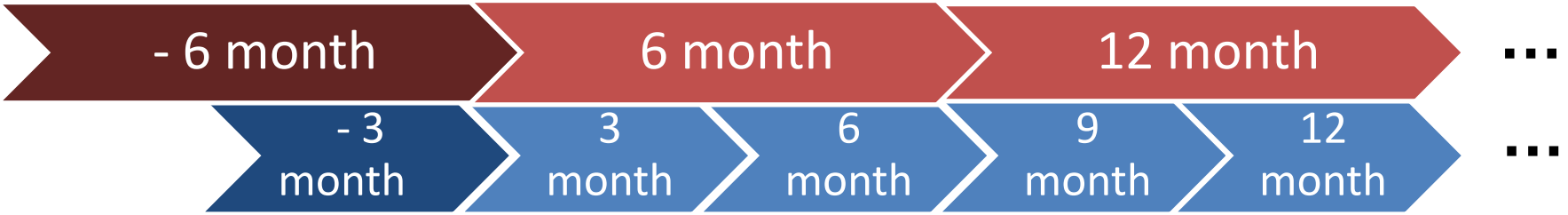
Treatment-as-usual

- A few participants served by ACT or ICM teams
- For the great majority, disconnected array of shelters, subsidized congregate housing (limited availability), hospital-based outpatient and inpatient care, etc.

RESULTS BASED ON 2 QUESTIONNAIRES

Health Social and Justice Service Use: visits to health & social service provider, crisis center, police contacts, court appearance, etc.

Residential Timeline Follow-Back: Overnight stays in street, shelter, apartment, hospital, prison, etc.



Final interviews at 24 months for the first 55% of participants, 21 months for the remainder.

ECONOMIC ANALYSIS

- Societal perspective, minus medications and employment income
- Cost data presented on annualized basis
- Unit costs estimated using a *top-down* approach with 2009-2010 annual reports and/or a *bottom-up* approach using interviews.
- Overhead, indirect costs and capital cost included.
- Hospitalization costs adjusted for homelessness (Hwang et al. 2011).

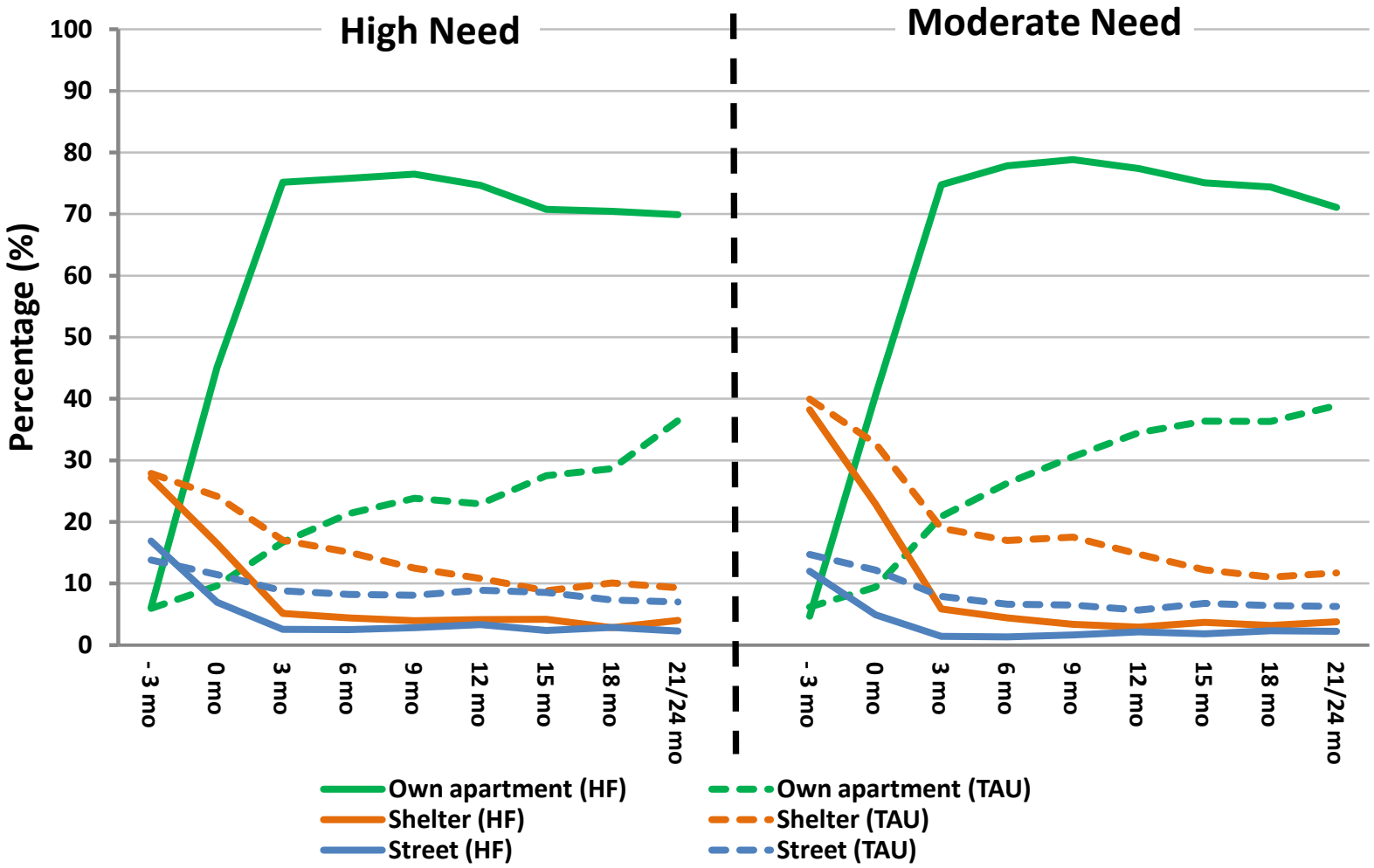
RESULTS

SAMPLE CHARACTERISTICS

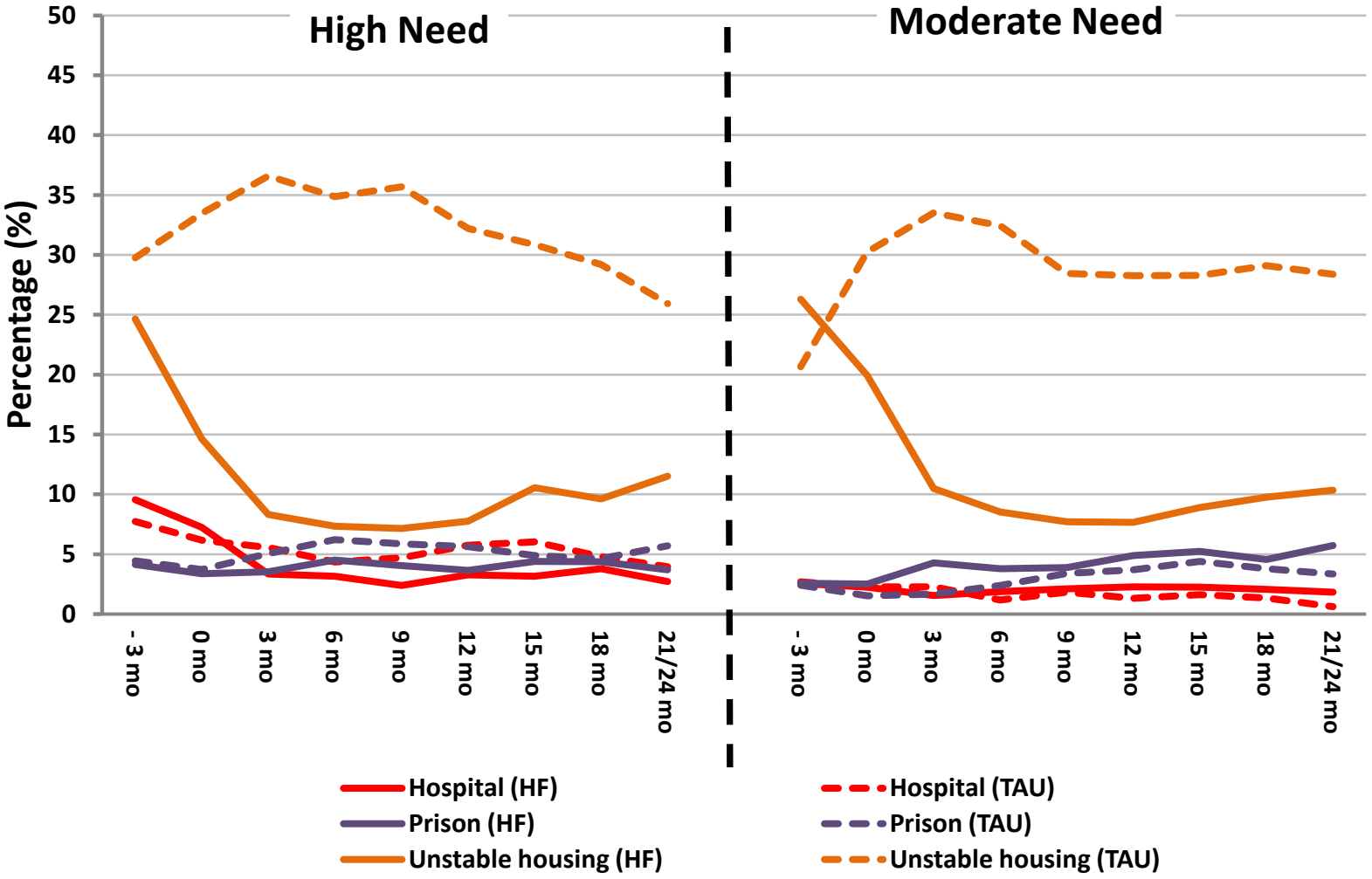
*Within each need level, Housing First (**HF**) and Treatment As Usual (**TAU**) had statistically similar distributions for (HF & TAU averages presented):*

- **Age: early 40's**
- **Sex: Male (68%) Female (32%)**
- **Single: 95%**
- **Have children: 32%**
- **High school completion: 44%**
- **Unemployed: 93% (65% have worked in the past)**
- **Average income: less than 685$ per month**
- **Average longest period homeless: 30 months**
- **Typical total time homeless: 5 years**

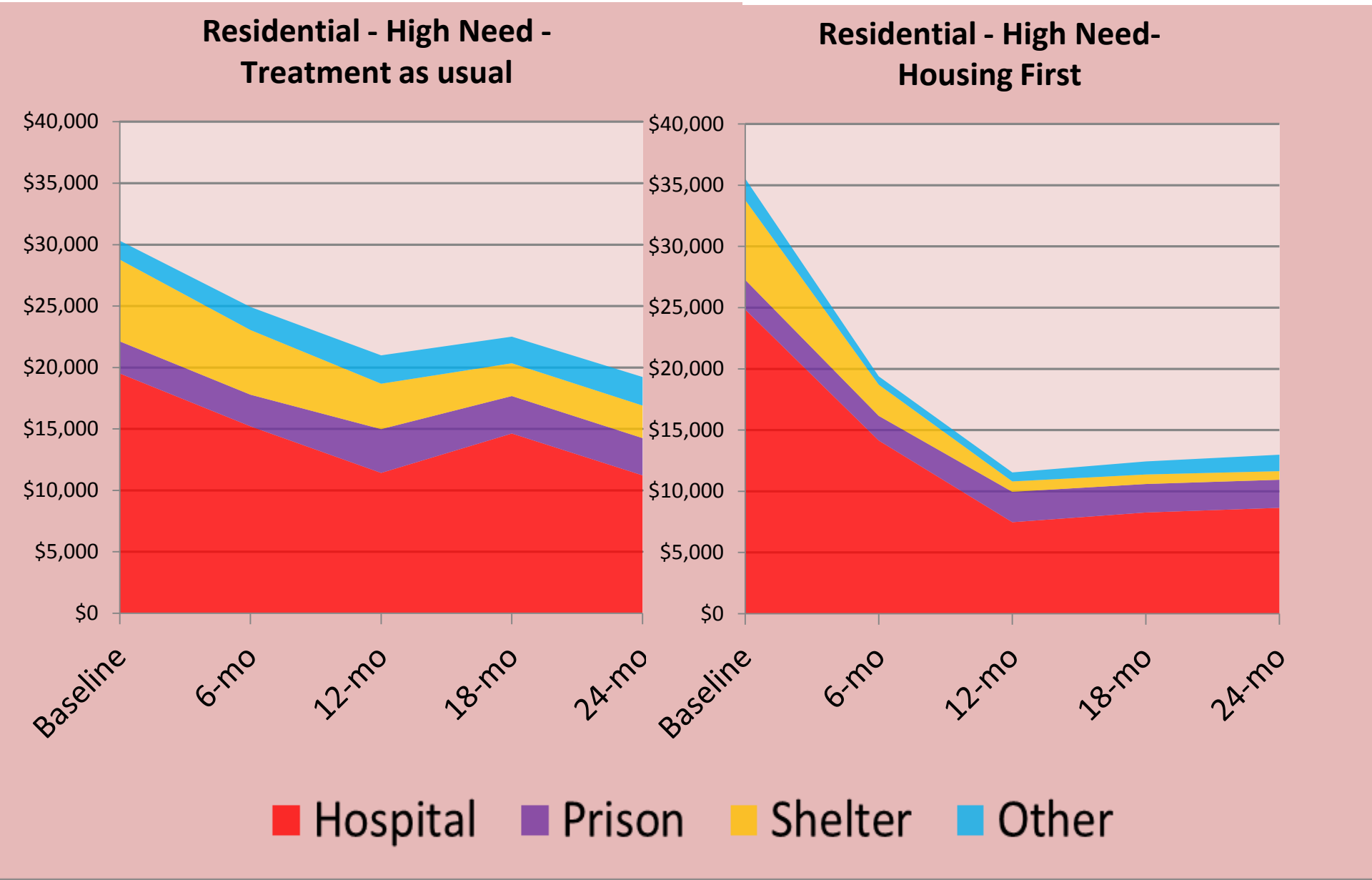
% of nights spent in own aptmt, shelter and street



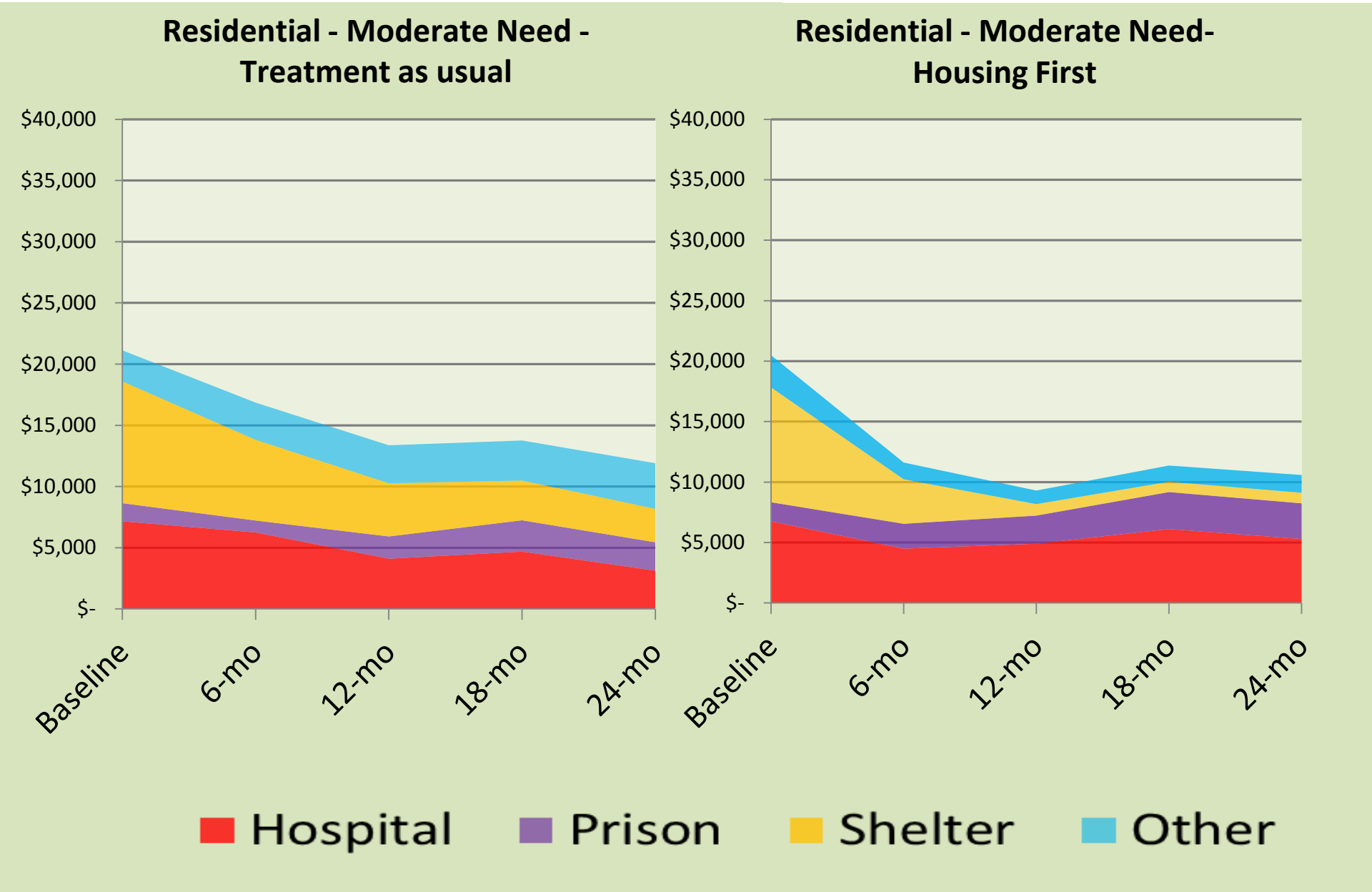
% of nights spent in hospital, prison & unstable housing



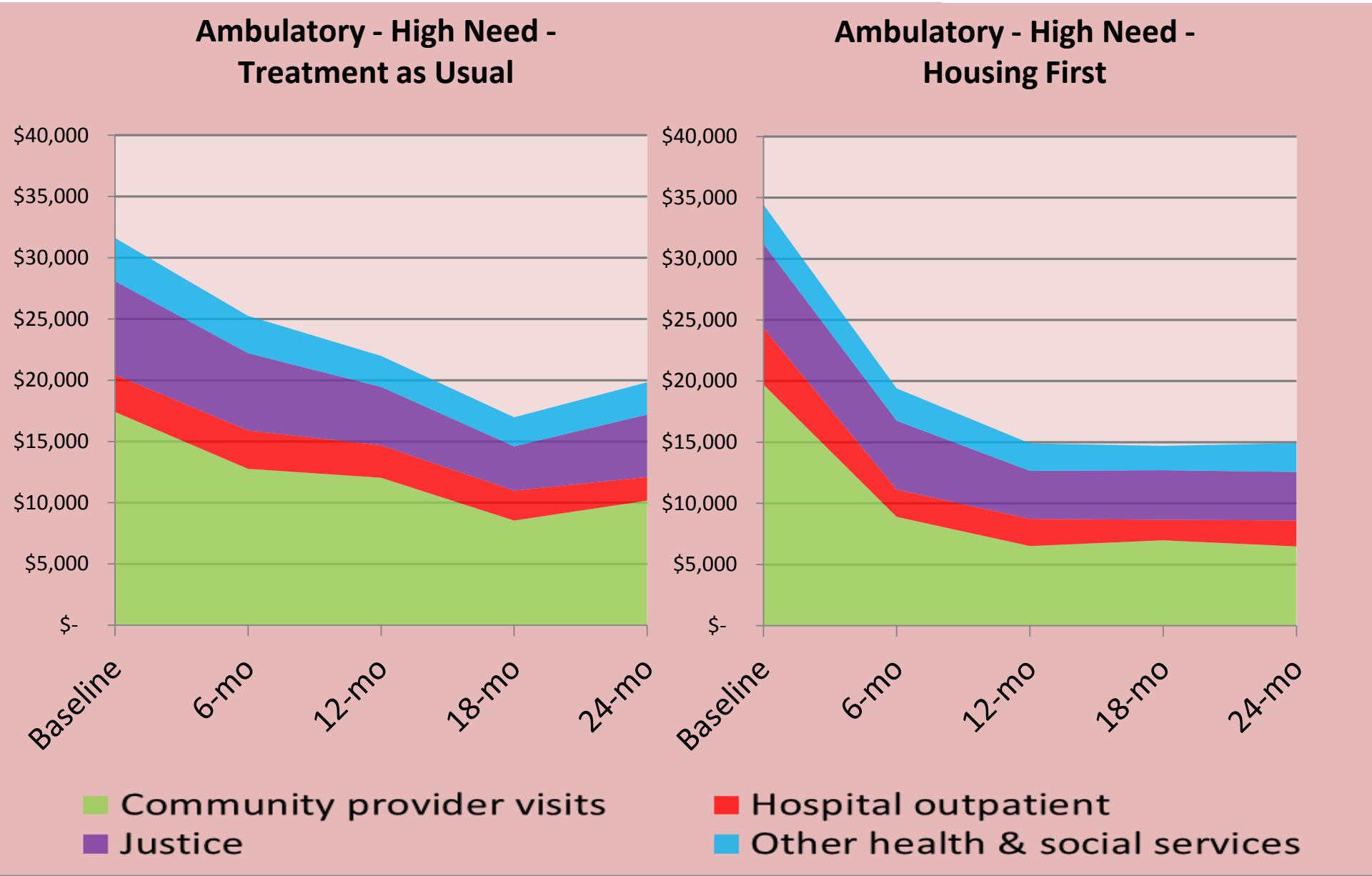
High Needs – Annual avg residential cost



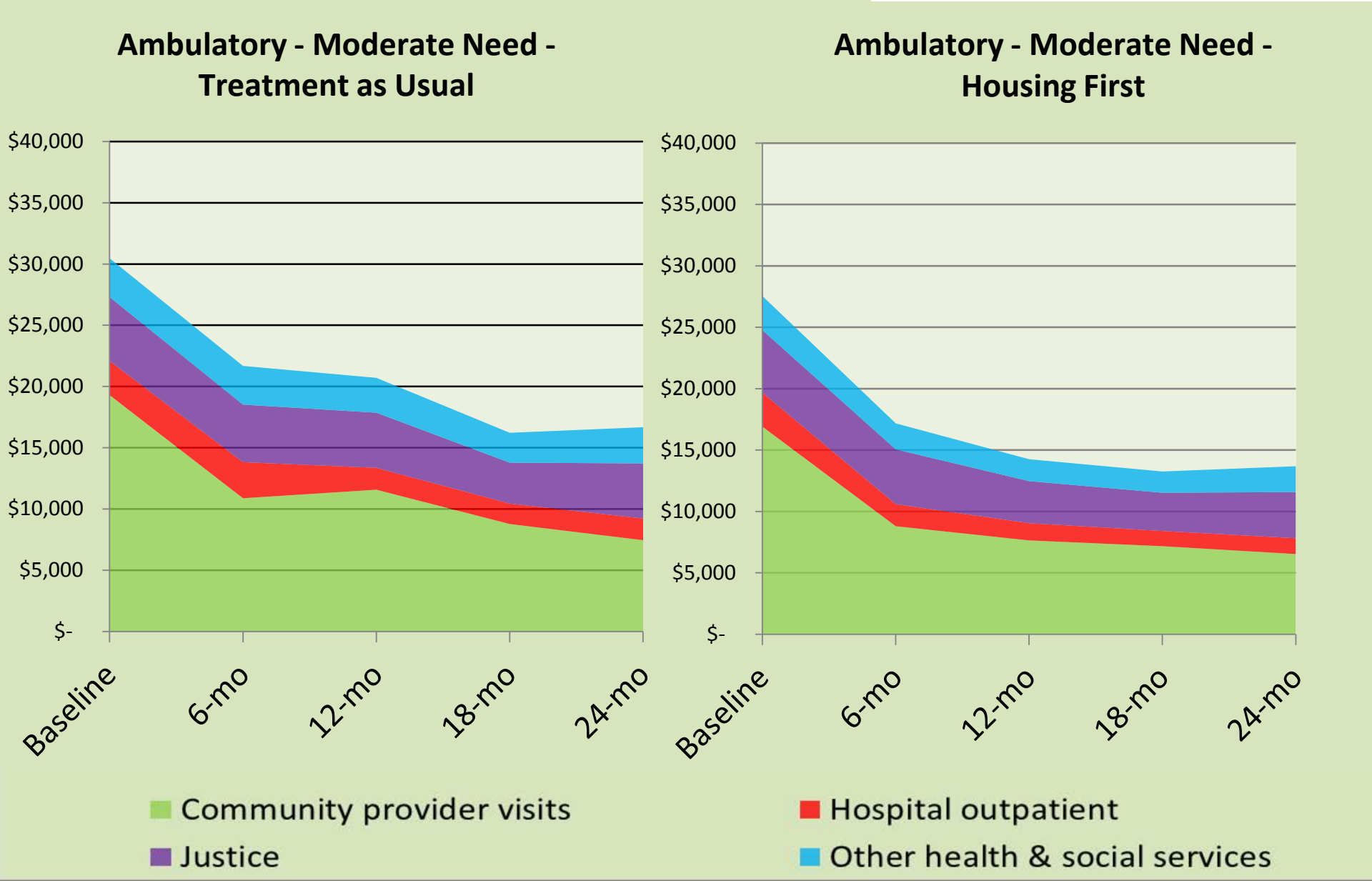
Moderate Needs – Annual avg residential costs



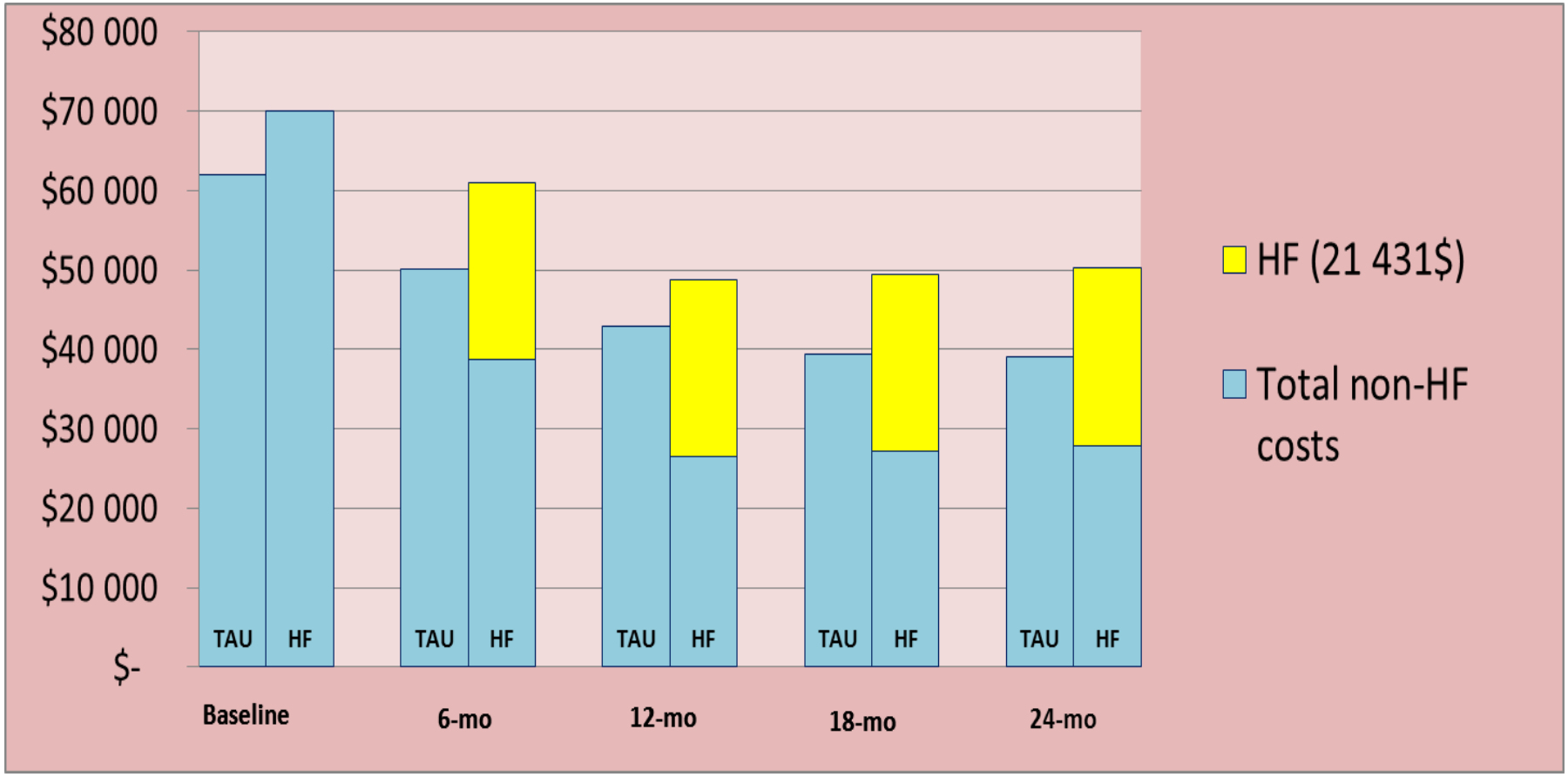
High Needs – Annual avg ambulatory svcs costs



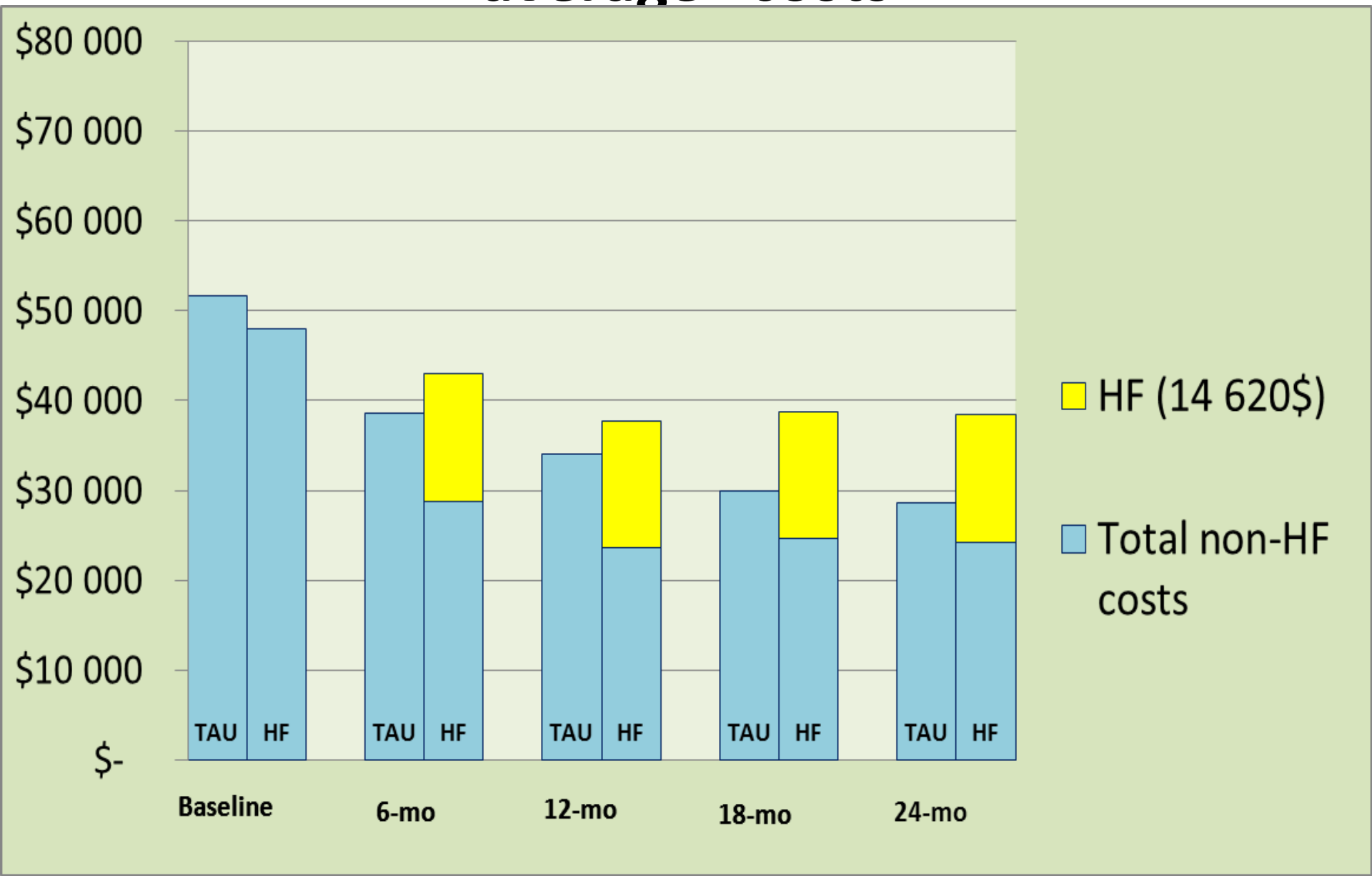
Moderate Needs – Annual avg ambulatory svcs costs



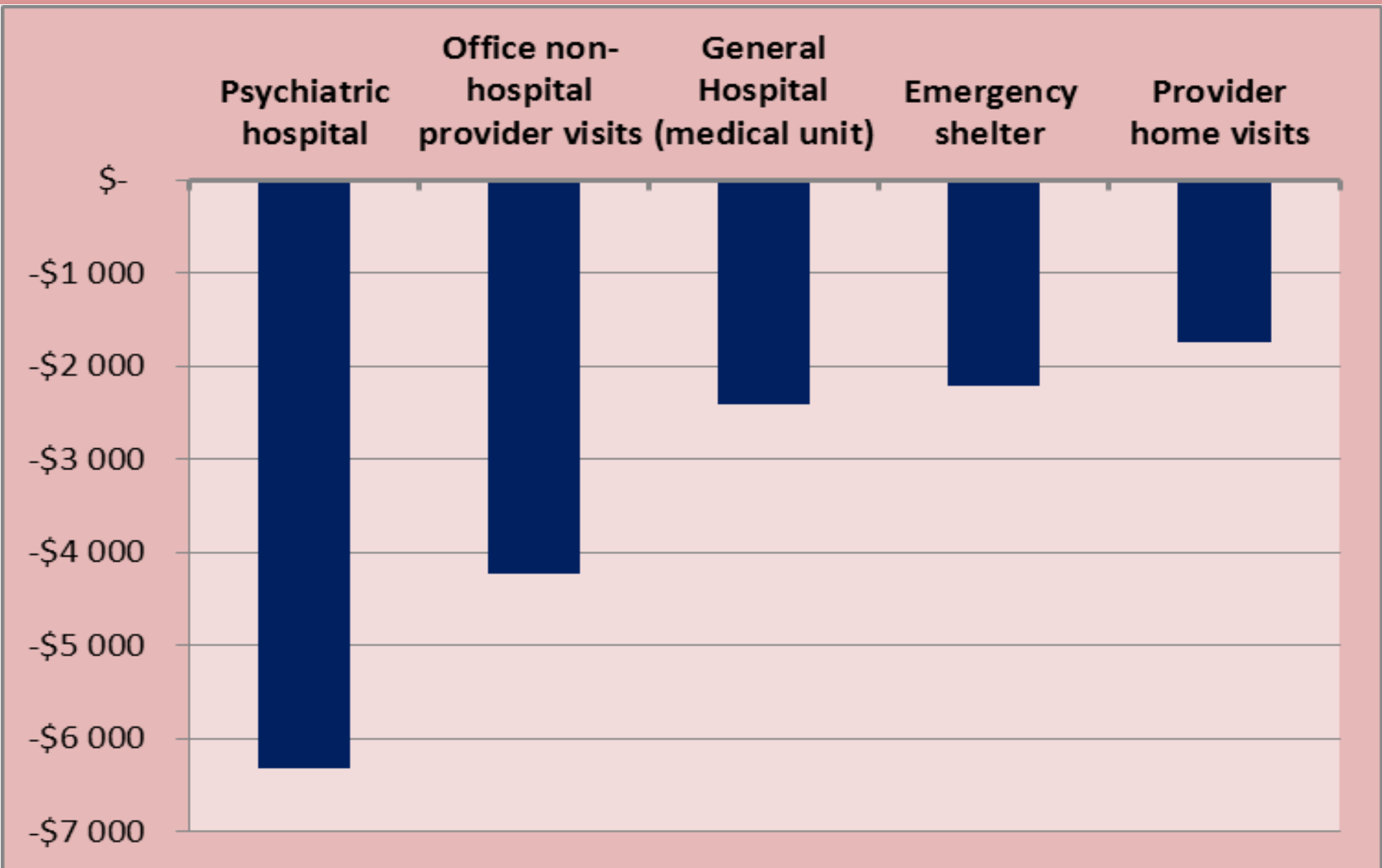
High Needs - Total annualized average cost



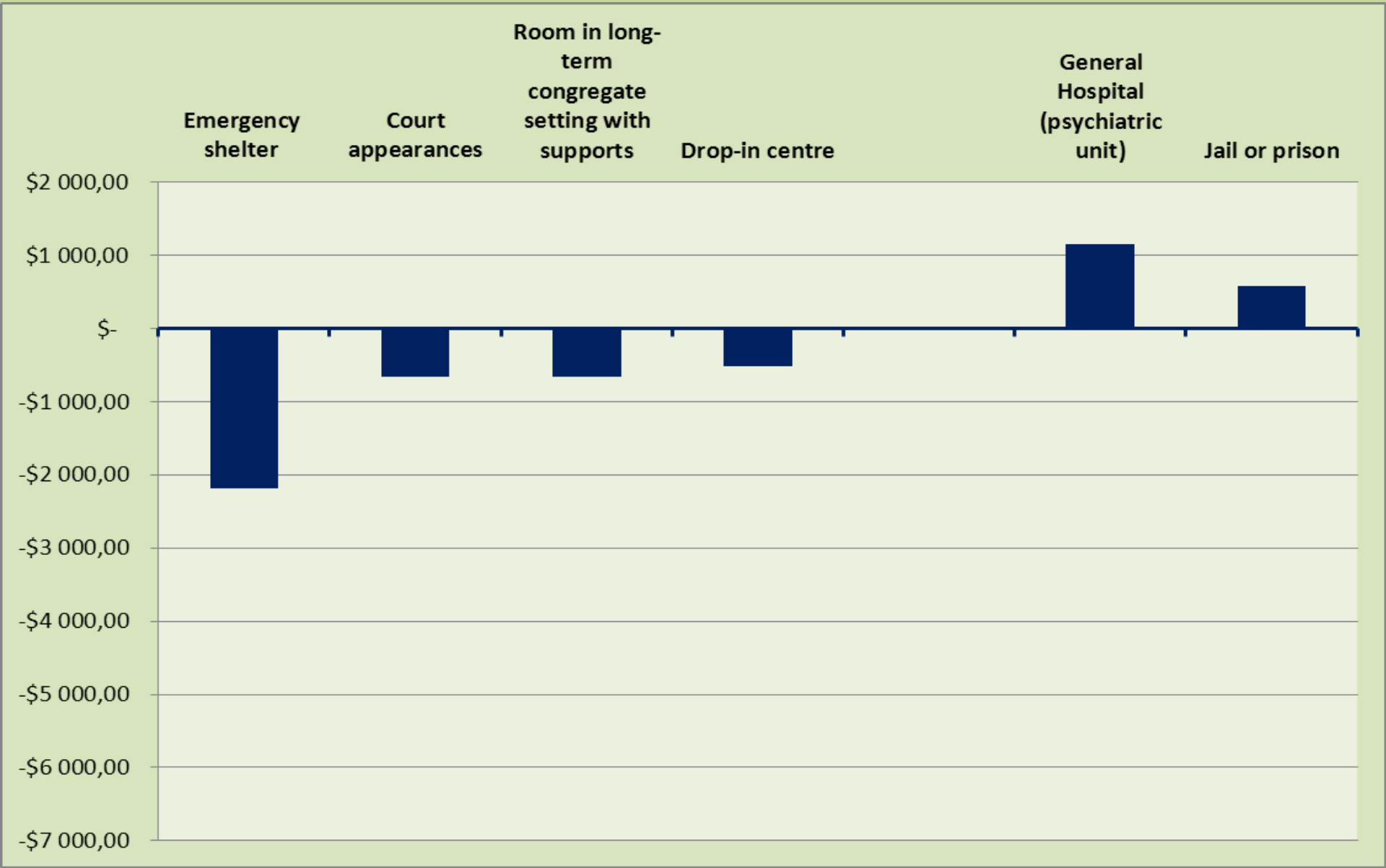
Moderate Needs – Total annualized average costs



MAIN COST OFFSETS AND INCREASES (>$500), HIGH NEEDS



MAIN COST OFFSETS AND INCREASES (>$500), MODERATE NEEDS



Conclusions

HF significantly increased time stably housed from 5% to 65% for high need groups and 8% to 85% for moderate need groups.

For both high and moderate need HF participants, point estimates of mean total health, social & justice services costs , the reduction in service costs offsets partly HF intervention costs.

Strengths and Limitations

Strengths :

- Randomized trial
- Large sample (n=2,148) with good follow-up rates
- Large number of unit costs estimated in a consistent manner

Limitations :

- Not all data incorporated, cleaned yet
- Differences not yet tested statistically – multiple imputation on the way.
- Medication costs not included.
- Transfer payments not included, nor employment income

POLICY IMPLICATIONS

Housing First interventions could be offered to all homeless people with mental illness, improving their housing stability at relatively low cost to society.

Thank you for your attention !

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Period average annual cost

0 to 21/24 mo	Treatment as usual	Housing First	Cost difference
High Needs	42 927$	52 343$	9 416$
Moderate Needs	32 789$	39 486$	6 697$

6 to 21/24 mo	Treatment as usual	Housing First	Cost difference
High Needs	39 275$	49 439 $	10 164$
Moderate Needs	30 875$	38 325$	7 451$

0 to 12 mo	Treatment as usual	Housing First	Cost difference
High Needs	39 487$	49 063$	9 576$
Moderate Needs	36 302$	40 348$	4 047$

Cost differences with baseline

- Based on 6-21/24 mo period, when adjusting for baseline differences, additional costs incurred by Housing First is $1425 for High Need participants and $11,026 for Moderate Need participants.
- Based on 0-21/24 mo period, when adjusting for baseline differences, additional costs incurred by Housing First is $957 for High Need participants and $10,270 for Moderate Need participants.