

# Soho Alcohol Recovery Centre: An Economic Evaluation

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# PHAST

- Public Health Consultancy
- **c400** projects & training programmes
- Over **100** Associates
- **Increasing UK scope:**  
NHS, Local Authorities, Private Sector, Charities
- **International work:**  
Australia, Sri Lanka, Gambia
- **Social Enterprise:**  
Surplus to charity UK & Internationally



# Context

- Drink-related health problems could account for up to **12% of total NHS** hospital spending
- Around **£3bn**
- In 2011/12 London Ambulance Service handled **66,254** emergency alcohol incidents
- **181** patients **every single day**
- **c6%** LAS calls



# Soho Alcohol Recovery Centre

**Client:** Central London Borough Council

**Partners:** PCT & LAS

**Context:** Internal pilot service evaluation

**PHAST:** Health economic analysis

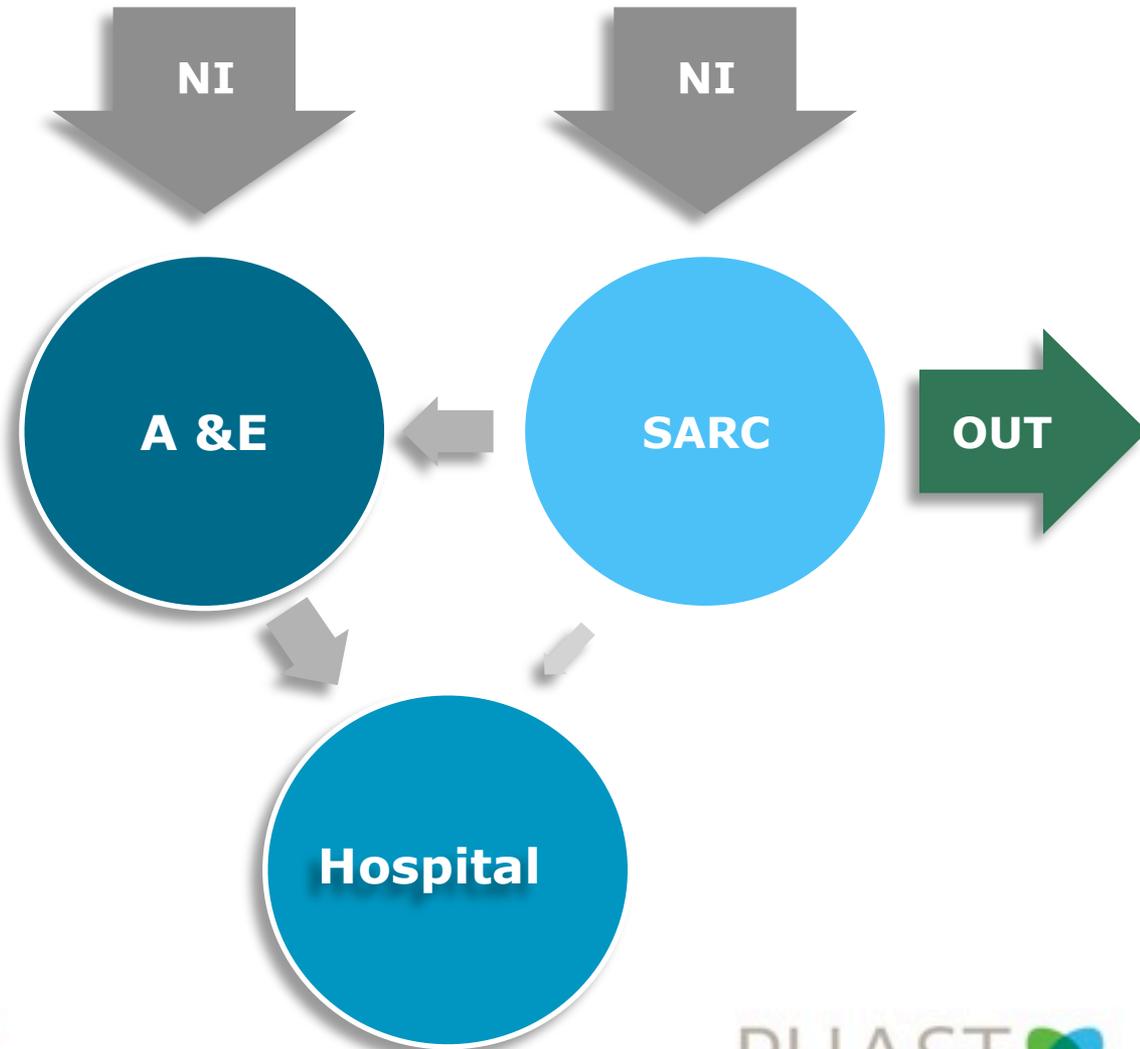
**Output:** NHS net-cost analysis report

- NHS 'field-hospital' in central Soho
- Walk-in centre
- Staffed by LAS
- Basic clinical care for safe recovery from excess alcohol with a clinical protocol
- Integrated with LAS 'booze bus' & 999
- Patient selection for SARC by LAS 999 staff - assessment against clinical protocol as A&E alternative



# Alternative Treatment Pathways

- Small proportion of SARC patients require transfer to A&E.
- Negligible proportion of SARC patients may be admitted to hospital
- Small proportion of A&E patients may be admitted to hospital (LOS 1 day).
- A proportion of A&E patients leave before being treated.



# Project Scope

## Assessment

Of the costing methods currently included in the draft evaluation report

## Advice

Advise on further development of methods in terms of scope & robustness.

## Costing

Provide revised net NHS costing using available data & evidence, including

## Comment

To comment on the contracting & funding implications.

# Assessment & Advice

## **Following our review of existing client costing methods:**

- Considered actual LAS staffing costs as opposed to the adoption of the LAS service/staffing 'price'.
- Considered alternative staffing scenarios, including skill mix, staff numbers, & addition of an alcohol advisor.
- Verified A&E costs.
- Added potentially avoided hospital admissions.

# Costing

## The model provided for SARC and A&E:

- Total cost of caring for the cohorts of patients over different time horizons.
- Total cost and cost per patient for various SARC staffing scenarios.
- Threshold analysis for cost-minimisation
  - A&E vs. SARC
  - SARC staffing scenarios

# Relevant Costs

## Patients can go to either:

Accident and Emergency

Soho Alcohol Recovery Centre  
(SARC)

Where the following direct costs are accrued

- A&E Attendance
- Hospital Admission
- Admission
- Length of Stay

- Accommodation/Security
- Consumables
- Staff
- Scenario 1 or
- Scenario 2 or
- Scenario 3 or
- Scenario 4
- Ambulatory Transfers to A&E

# Resources Used

	<b>Unit</b>	<b>Source</b>	<b>Notes</b>
<b>Average patients / 8hrs</b>	15	SARC	
<b>Average patients /12 nights</b>	180	PHAST	(15 X 12 nights)
<b>Average patients transferred from SARC to A&amp;E</b>	3.6 (c2%)	SARC	
<b>Average patients leaving A&amp;E before treatment</b>	54 (30%)	St. Mary's (7)	Assumed patients do not incur cost
<b>Average A&amp;E patients admitted to hospital</b>	7.2 (4%)	St. Mary's (7)	A&E cohort only
<b>Average length of stay for admitted patients</b>	1 day	St. Mary's (7)	

# Alternative Staffing Scenarios

## Scenario 1 (7)

- 1 Team Leader
- 3 Paramedics
- 2 EMTs
- 1 Alcohol Worker

## Scenario 2 (5)

- 1 Team Leader
- 1 Paramedics
- 2 EMT
- 1 Alcohol Worker

## Scenario 3 (6)

- 1 Team Leader
- 1 Paramedic
- 4 EMTs
- 1 Alcohol Worker

## Scenario 4 (7)

- 1 Team Leader
- 2 Paramedics
- 2 EMTs
- 1 Alcohol Worker

# Project Findings

# A&E vs. SARC Staffing Scenario Costs

	A&E	SARC (Staff)	SARC (Staff Scenario 2)	SARC (Staff Scenario 3)	SARC (Staff Scenario 4)
<b>15 PATIENTS PER NIGHT</b>					
<b>Per Patient</b>	£89	£116	£92	£104	£117
<b>Per Night</b>	£1,338	£1,736	£1,379	£1,558	£1,756
<b>Per Month</b>	£16,051	£20,834	£16,550	£18,692	£21,069
<b>Per Year</b>	£192,607	£250,004	£198,604	£224,304	£252,830
<b>30 PATIENTS PER NIGHT</b>					
<b>Per Patient</b>	£89	£62	£50	£56	£62
<b>Per Night</b>	£2,675	£1,847	£1,490	£1,668	£1,866
<b>Per Month</b>	£32,101	£22,162	£17,879	£20,020	£22,398
<b>Per Year</b>	£385,214	£265,945	£214,545	£240,245	£268,771

# Staffing Scenario Costs

- At 20 patients per night, all but **Staffing Scenario 4** become cost saving when compared to the A&E setting. **Staffing Scenario 4** is 46p more expensive per patient at this level of throughput.
- **Staff Scenario 2** looks to be the most cost saving of the scenarios. This is most likely due to the low staff numbers in this scenario (5, compared to 6 staff in scenario 3, and 7 staff in **scenarios 1 and 4**).
- **Staffing Scenario 2** becomes cost saving at 16 patients, **Staffing Scenario 3** becomes cost-saving at 18 patients, **Staffing Scenario 1** becomes cost saving at 20 patients, and **Staffing Scenario 4** becomes cost saving at 21 patients.

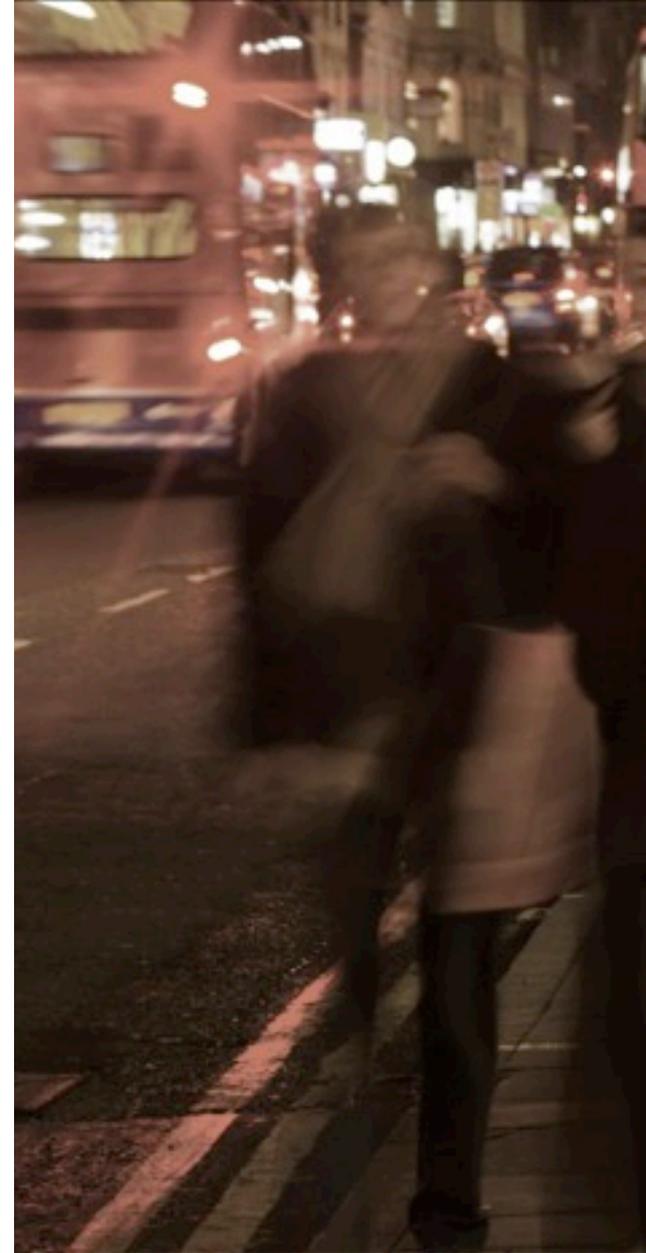
# SARC vs. A&E :Per Patient Costs

	<b>Staffing Scenario 1</b>	<b>Staffing Scenario 2</b>	<b>Staffing Scenario 3</b>	<b>Staffing Scenario 4</b>
<b>15</b>	£115.74 (+)	£91.95 (+)	£103.84 (+)	£117.05 (+)
<b>20</b>	£88.65 (-)	£70.80 (-)	£79.73 (-)	£89.63 (+)
<b>25</b>	£72.40 (-)	£58.12 (-)	£65.26 (-)	£73.18 (-)
<b>30</b>	£61.56 (-)	£49.66 (-)	£55.61 (-)	£62.22 (-)

**(+ more than A&E, - less than A&E)**

# SARC vs. A&E Costs

- The A&E scenario per patient cost (£89) is less than the unit cost (£97.50) because of the assumption that some patients leave before being treated and are not billed for.
- At baseline (15 patients per night), SARC is more expensive than A&E regardless of the staffing scenario.
- **Near the maximum capacity treated in the pilot (30 patients) per night the SARC scenario is considerably less expensive than the A&E scenario.**



# Conclusion: NHS Cost

**SARC has the potential to be a cost-saving, or at very least cost-neutral intervention for the NHS.**

The exact net NHS cost impact depends on identifying the optimal staffing scenario and ensuring adequate patient throughput.



# Conclusion: Other Impacts

- Improved efficiency of booze bus operation, through shorter journeys & turn-around times.
- Focused & more appropriate treatment of alcohol needs in a specialist setting.
- Freed capacity in A&E to deal with other & potentially more serious emergency health care needs.
- Potential reductions in A&E waiting times.
- Improvement of A&E care environment for both patients & staff by reduction in the numbers of intoxicated patients.
- Reduction in crime & disorder, & burden on police & other staff, due to more rapid response to needs of intoxicated people.
- Collection of licensing intelligence.
- *[londonambulance.nhs.uk/news/alcohol-related\\_calls.aspx](http://londonambulance.nhs.uk/news/alcohol-related_calls.aspx)*

## **Acknowledgements**

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# Thank You