

# A Regional Medicines Optimisation Model for Older People in Care Homes

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## Background

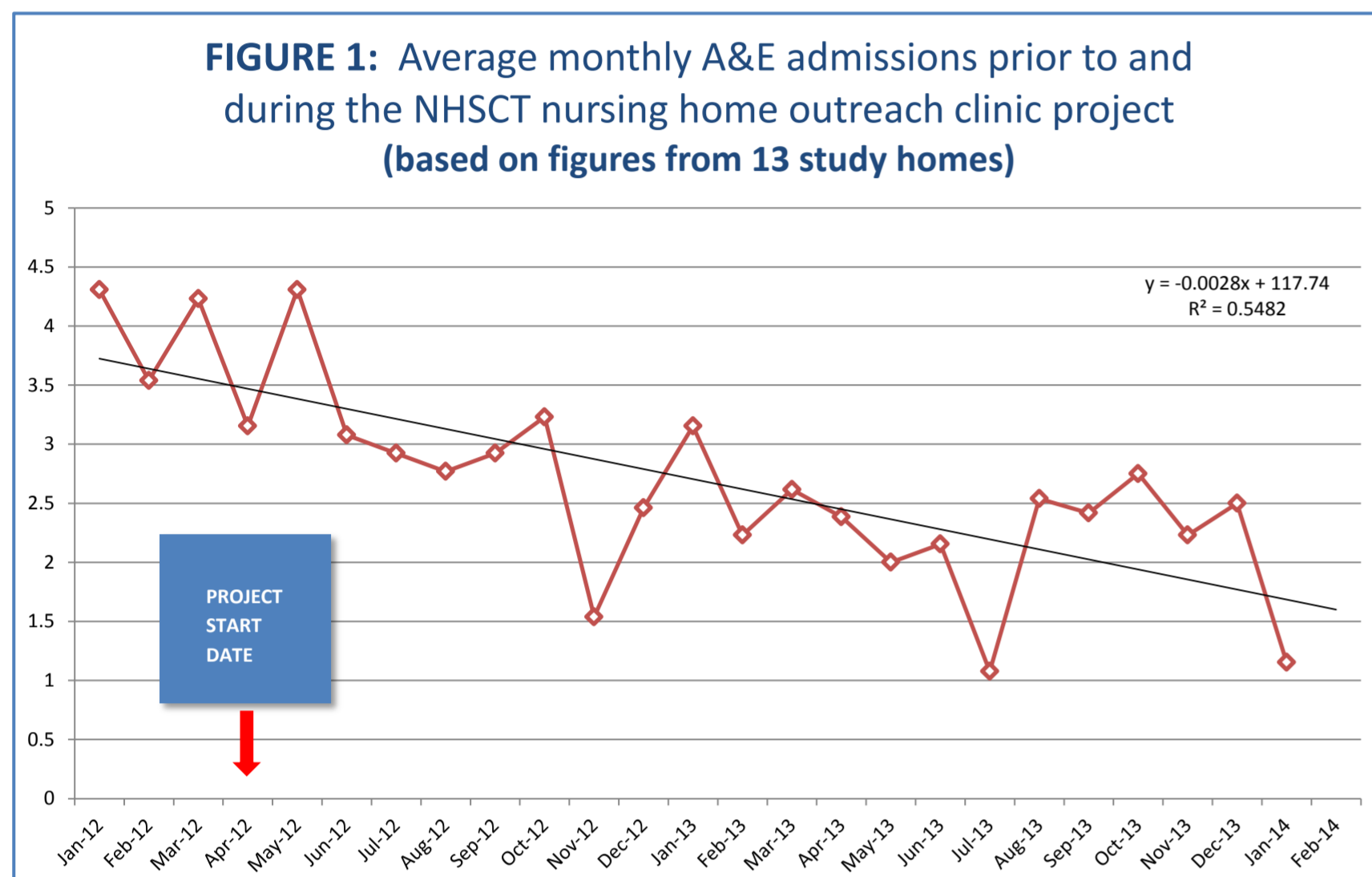
In 2012, the NHSCT implemented and evaluated consultant pharmacist led trust outreach clinics for care home patients. This service resulted in a 14% reduction in A&E admissions together with improved prescribing and drug cost savings<sup>1</sup>.



The WHSCT Medicines Optimisation in Older People team working in both intermediate care and care homes



The NHSCT Medicines Optimisation in Older People team working in both intermediate care and care homes



## Aim

To refine the consultant pharmacist led medicines optimisation care home model and reproduce this in another trust, thereby demonstrating the ability to potentially introduce this new model of care throughout Northern Ireland.

## The Model

The original model required the consultant pharmacist to conduct clinics either alone or in collaboration with a consultant geriatrician. Results from 2012-2014 indicated the consultant pharmacist working alone produced similar results as to when working together with the geriatrician; the decision was therefore made for the pharmacist to work alone and to refer more complex patients to the medical specialist when deemed necessary. Figure 2 shows the refined general model for medicines optimisation in care home patients.

In the NHSCT all clinical interventions and recommendations identified are communicated to the GP via a letter. In August 2015 two Band 8a older people specialist pharmacists were recruited into the service. One 1.0WTE equivalent pharmacist is working within the consultant pharmacist led service, whilst another 0.6WTE pharmacist is revisiting homes to establish how often care home patients need to be reviewed in order to maintain the desired clinical and economic outcomes.

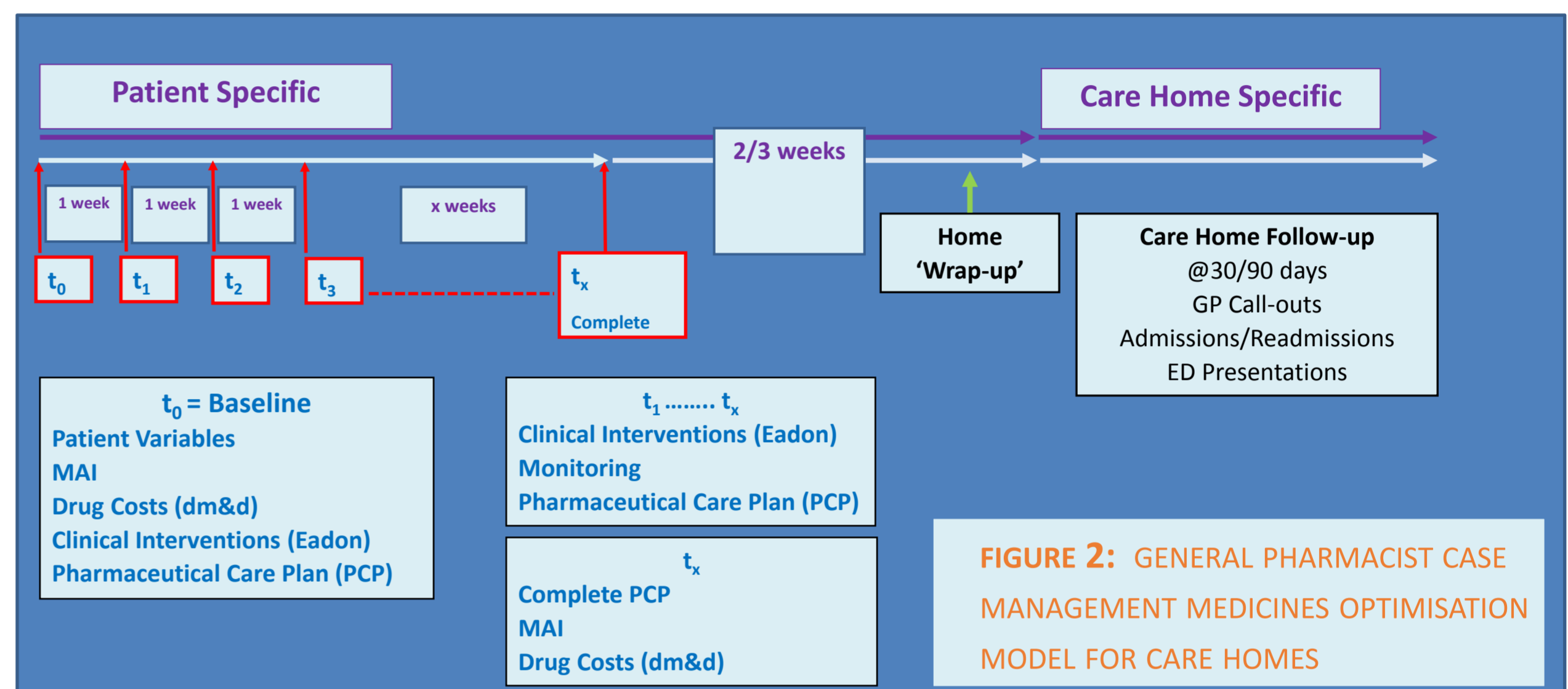
The WHSCT recruited two similar 1.0 WTE pharmacists who have delivered the same model since September 2015. These pharmacists are also testing different GP communication models where clinical interventions may be actioned via letter, teleconference or direct access to the GP system (Figure 3).

## Interim Results

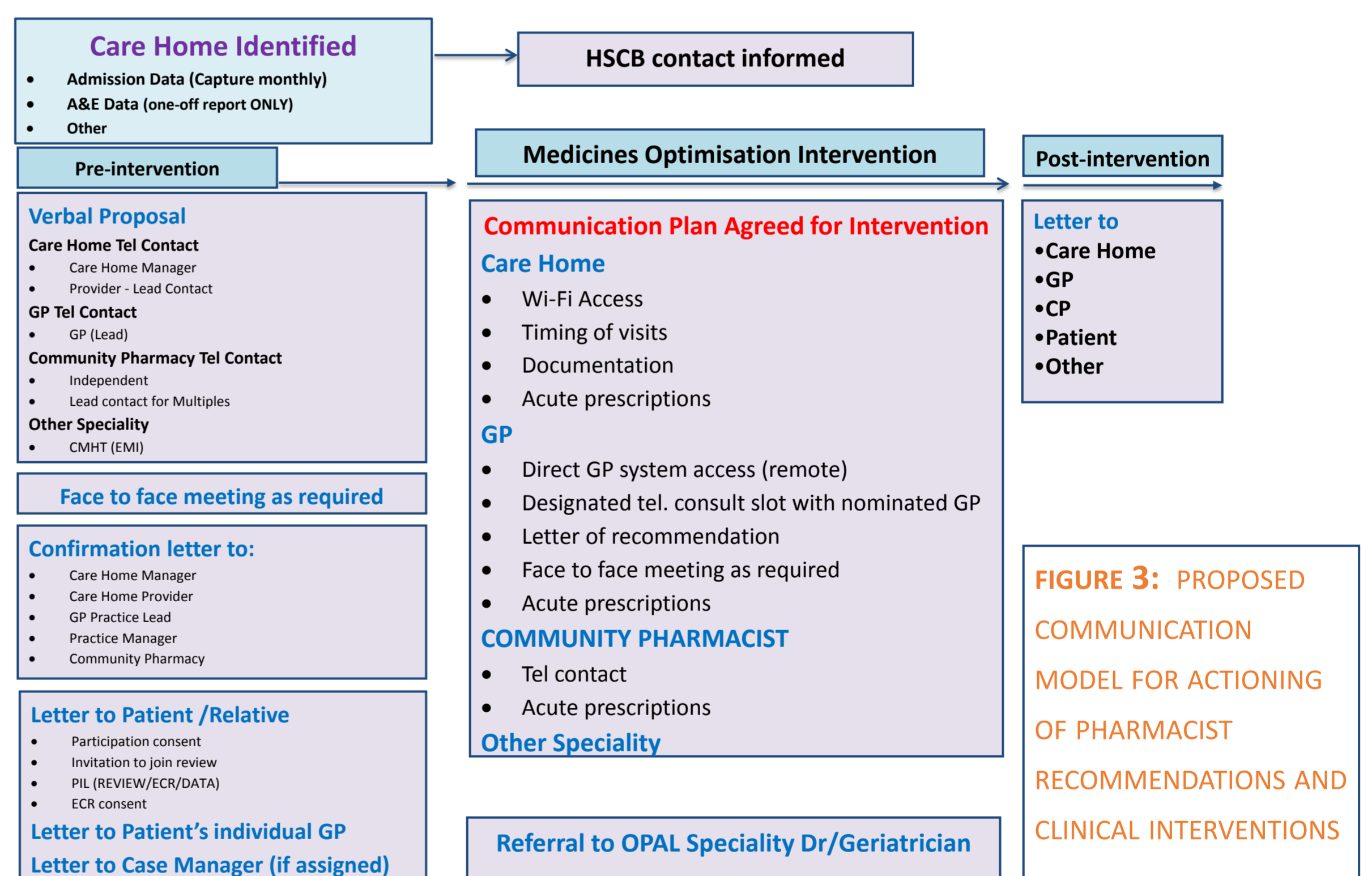
Data collection started on 1<sup>st</sup> September 2015 and is ongoing. Interim results (February 2016) are presented here. The potential annual drug cost savings are estimated at £273k to £382k across the two trusts representing an invest to save return of £1.51 - £2.12 per £1 invested in drug cost savings alone. An economic model for healthcare resource usage is being developed with the final data to be reported early 2017.

## Funding

This work falls under the remit of the Regional Innovations in Medicines Management work stream and was supported by the DHSSPSNI Change Fund. From April 2016, the work has been funded by the Department of Health Transformation Fund.



**FIGURE 2: GENERAL PHARMACIST CASE MANAGEMENT MEDICINES OPTIMISATION MODEL FOR CARE HOMES**



**FIGURE 3: PROPOSED COMMUNICATION MODEL FOR ACTIONING OF PHARMACIST RECOMMENDATIONS AND CLINICAL INTERVENTIONS**

**TABLE 1: Interim results (February 2016) for patients reviewed in NHSCT and WHSCT care homes**

	REFINED CARE HOME MEDICINES OPTIMISATION MODEL		
	WHSCT (Southern Sector) SEPT '15 – FEB'16 (n=138)	WHSCT (Northern Sector) SEPT '15 – FEB'16 (n=127)	NHSCT SEPT '15 – FEB'16 (n=257)
Age (mean ± SD, Range)	83.9 ± 8.3 years (64 – 100)	82.6 ± 8.7 years (65-102)	85.2 ± 7.0 years (65-99)
Type of access to GP	138 Real time access	52 Real time access 49 Letter to GP 26 Letter & phone call	256 Letter to GP 1 Letter & phone call
No. of medicines taken on first pharmacist contact (mean ± SD, Range)	14.0 ± 4.7 (4 to 29)	10.4 ± 4.1 drugs (1 to 22)	13.0 ± 5.1 drugs (1 to 32)
Total MAI <sup>2</sup> before pharmacist review (mean ± SD, Range)	28.4 ± 15.9 (0-79)	14.0 ± 11.9 (0-67)	12.3 ± 10.9 (0-63)
Total MAI <sup>2</sup> after pharmacist review (mean ± SD, Range)	3.3 ± 4.2 (0-18, n=111)	0.6 ± 2.1 (0-16)	0.4 ± 1.2 (0-12)
Number of clinical interventions identified (week 1) (mean ± SD, Range)	3.9 ± 2.1 (0 – 12, n=130)	2.3 ± 1.5 (0 – 8)	2.8 ± 2.3 (0-12)
Number of new clinical interventions during monitoring (mean ± SD, Range)	0.2 ± 0.5 (0-3, n=105)	0.6 ± 1.1 (0-9)	0
Total number of clinical interventions from baseline t <sub>0</sub> to review completion t <sub>x</sub> (mean ± SD, Range)	4.0 ± 2.3 (0-12, n=105)	2.8 ± 1.9 (0-10)	2.8 ± 2.3 (0-12)
% Clinical Interventions Eadon <sup>3</sup> Self-Grade ≥ 4	79.1	89.4	91.5

## References

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