

# "Not for Play" Campaign End of year Evaluation



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Front page photo: NHS Greater Glasgow and Clyde

#### 1. Introduction

#### 1.1 Purpose of the Report

This report outlines the results of the end of year evaluation of the "Not for Play" campaign which was implemented in the NHS Greater Glasgow and Clyde (NHS GGC) Health Board area during the period July 2013 to July 2014. The evaluation was conducted throughout the project by RoSPA in association with Rocket Science.

### 1.2 Key Audiences

The primary audiences for the report are: NHS GGC and other Public Health or Health Board areas, Local Authorities, the Scottish Government and local partner agencies. The report will be beneficial as a framework for other organisations interested in replicating the campaign in their local areas.

#### 1.3 Scope of Campaign

The "Not for Play" campaign was an initiative aimed at tackling the growing concern of liquitab ingestion injuries to children in the NHS Greater Glasgow and Clyde Board area. The campaign aimed to utilise a multifaceted approach to raise awareness of the product, in order to try and prevent ingestions of liquitabs. The campaign proposed to provide every parent/carer with a baby at 12-16 weeks of age with an information pack. In addition, Health Visiting Teams raised the issue of liquitabs and the importance of prevention. Parents/carers were encouraged to fit the cupboard catch, move liquitabs into a storage area that was not accessible by children and to keep liquitabs and household cleaning products out of reach. The information pack included an awareness leaflet as well as a cupboard catch which could be fitted in the kitchen to help prevent access to potentially dangerous household cleaning products.

The campaign fits with the NHS GGC Child Safety Strategy which is based on Scotland's Child Safety Strategy and was ratified by NHS GGC's Child and Maternal Health Strategy Group. This strategy provides an action plan of activities to keep children safe from unintentional injuries and in this case from the potential dangers of liquitabs.

#### 1.2 Scope of the Evaluation

The information gained and the impact of the campaign implemented during the project is the central focus of this evaluation report. The report highlights the design and approach of the campaign as well as the outcomes and impact on staff and families involved.

The approach of the evaluation was mixed with both qualitative and quantitative data. A Baseline Survey was conducted with parents during the project which helped form a baseline to the issue. One to one, face to face interviews were used as part of the post project evaluation along with a stakeholder survey of staff who were using the resources and having meaningful conversations with parents and carers.

### 2. Campaign Profile

#### 2.1 Campaign Background

In 2012, a new trend in unintentional injuries was reported by clinicians at the Royal Hospital for Sick Children, Yorkhill, Glasgow<sup>1</sup>. Very young children, averaging 18 months of age were being brought into the Accident and Emergency department as a result of ingestion of liquitabs. Before implementation of the campaign across NHS GGC, nine children, over one year, were admitted to Yorkhill Hospital's Ear Nose and Throat (ENT) Department for specialist treatment.

Liquitabs are brightly coloured capsules used as an alternative to washing powder in washing machines and dishwashers. They are solvent based products containing high levels of surfactants (anionic as well as noniconic) and soap<sup>2</sup>. They are usually placed in the drum area of washing machines or dishwashers and quickly dissolve when coming into contact with other liquids. The injuries caused by these products can be serious. Children are often transported by ambulance with life threatening conditions. For example, many of the children suffer breathing difficulties and oedma, or swelling of the airway requiring life support, or intubation and in some cases reconstructive surgery.

## 2.2 Campaign Purpose

The overarching purpose of this campaign was to respond to this new trend and deliver home safety advice and information on the issue to parents across the NHS GGC Health Board area. It was proposed that this would help to increase awareness of the issue and help reduce the incidence of these injuries.

#### 2.3 Campaign Objectives

The objectives of the "Not for Play" campaign were:

To raise awareness of the dangers of these products

To scope out the behaviour of families around these products

To gather more data on injuries related to liquitabs

To provide families with practical help and information to prevent injuries

To reduce the number of injuries presenting and being admitted to Yorkhill Hospital

To execute this campaign in an effective and cost efficient way.

<sup>&</sup>lt;sup>1</sup> Fraser, L., Wynne, D., Clement, W.A., Davidson, M., Kubba, H. Liquid detergent capsule ingestion in children: an increasing trend. Archives of Disease in Childhood. 2012; 97(11): 1007

<sup>&</sup>lt;sup>2</sup> A.I.S.E. Product stewardship programme for liquid laundry detergent capsules status report. 2013

## 2.4 Campaign Activities

The main activities involved in this campaign included:
☐ Creation of a detailed partnership between interested organisations
☐ Consultation with parents/carers and staff on the creation of a safety pack including the slogan and contents
$\Box$ Delivery of packs via health visiting teams who would provide the packs to families as part of their mandatory 12 – 16 week visit.
□ Engagement with the media to promote the campaign
<ul> <li>□ A Baseline Survey with families who then subsequently received the pack from a Health Visitor</li> </ul>
□ Focus groups/interviews in two areas after the distribution of packs
□ A Health visitor survey with teams in 2 areas in the Health Board area
☐ A Cost Benefit Analysis.
2.5 Campaign Outputs
The following outputs were identified for the campaign:
□ The creation of a safety pack including a leaflet and cupboard latch
☐ The creation of a detailed briefing note for Health Visiting Teams, providing detailed information on the Not For Play, Keep them away programme
□ End of Year report detailing the evaluation of the project
2.6 Expected Results - Outcomes
The expected results of the campaign are as follows:
□ Awareness of the product raised in the NHS GGC area
$\hfill \square$ Informative data on the behaviour of parents around the product
□ New self reported parental data on injuries from liquitabs
□ Positive observations on providing families with help to prevent injuries
<ul><li>□ A decrease in liquitab hospital admissions at Yorkhill hospital</li><li>□ A cost benefit analysis.</li></ul>

## 3. Evaluation Profile

## 3.1 Purpose of Evaluation

The overall purpose of the evaluation was to assess the outcomes of the "Not for Play" campaign. This evaluation could provide valuable information for future work. In addition, its framework may help to inform other interventions on liquitabs across the country.

#### 3.2 Objectives

The evaluation aimed to provide an unbiased analysis of the outcomes of the campaign. The key objectives included:

□ -	To analyse awareness levels of the dangers of liquitabs
□ -	To identify the behaviours of families around these products
□ -	To compare baseline data of admission injuries with injuries at Yorkhill hospital during and
	after the year of the campaign
□ -	To analyse health visitors observations of the campaign in order to help identify successes,
	issues and lessons to be learned
□ -	To analyse the cost efficiency of the campaign.

## 3.3 Evaluation Methodology

The evaluation used a mixed methodology in order to fulfil its objectives and purpose. It consisted of:

☐ A baseline survey with families receiving the safety packs	
□ Semi-structured interviews with families after dissemination of the packs	
$\ \square$ A stakeholder survey of Health Visiting Teams who distributed the packs and had contain	act
with the families	
□ A cost benefit analysis of the project in comparison to the costs incurred by the Ears No	ose
and Throat department in the NHS as a result of these injuries.	

Using both quantitative and qualitative data in this evaluation has helped to compliment the outcomes of the project by providing statistical information as well as opinions and observations of individuals involved in the project.

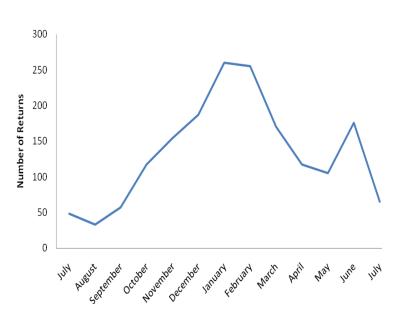
#### 3.3.1 Baseline Survey

A Baseline Survey was created in consultation with the working group on this campaign. The survey consisted of 6 questions which were carefully designed and written to help gauge information on the behaviour and awareness associated with liquitabs.

The Baseline Survey was included in the safety packs which were handed out by Health Visitors during their 12 – 16 week visits. They were completed by the family and handed back to the Public Health, Child and Maternal Health Team. Completed surveys were delivered to RoSPA and analysed.

Overall, 1744 of the 16000 surveys were returned, providing an 11% percent response rate. A breakdown of survey return by month can be seen in table 1.

Table 1: Survey Return	
Month	Return No
July	48
August	33
September	57
October	117
November	154
December	187
January	260
February	255
March	170
April	117
May	105
June	176
July	65
Total	1744



## **Age of Respondents**

59% of the individuals who answered the short survey were in the age range 25-34 years at the time of responding.

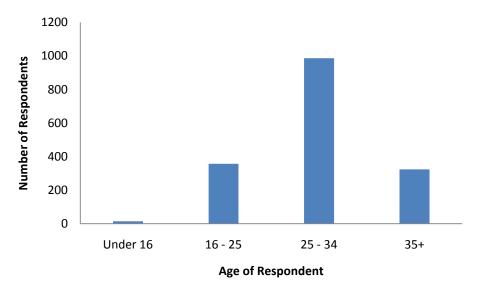


Table 2: Ages of respondents to the survey (n = 1680)

#### **Areas of Response**

Valid postcode data was provided by 94% (n=1642) of respondents. Please see Appendix 1 for methodology of geographical analysis. Table 3 shows a breakdown by local authority area, whilst table 4 breaks down Glasgow City.

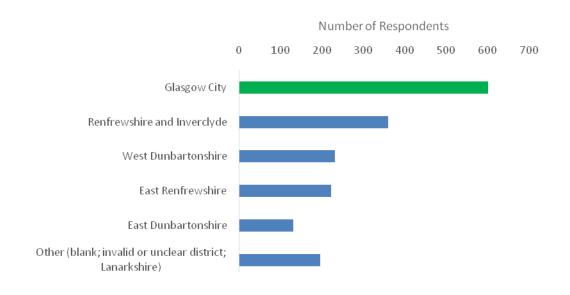


Table 3: Local Authority area of respondents to the survey (n = 1642)

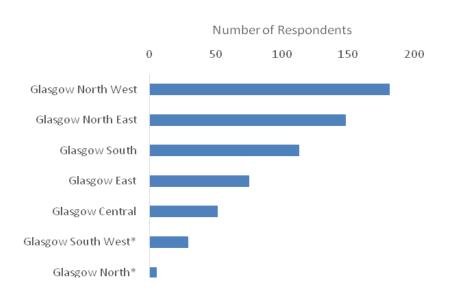


Table 4: Respondents in Glasow City by Paliamentary Consituency

#### 3.3.2 Semi Structured Interviews

Four visits to baby clinics formed the qualitative part of this evaluation. Two areas in the NHS GGC Health Board area were chosen and overall 18 parents were interviewed. The interviews took place 9 months after the project initiated. The breakdown of interviews can be seen below:

Table 5: Semi Structured Interviews			
		No of	
Date	Place	participants	
19/03/2014	Drumchapel	4	
20/03/2014	Plean Street	5	
09/04/2014	Drumchapel	5	
10/04/2014	Plean Street	4	

#### 3.3.3 Health Visitor Survey

An online survey was carried out by 2 Health Visiting Teams in the NHS GGC board area. This survey included 8 questions and took place at the end of the first year in July, 2014.

The purpose of this survey was to help analyse Health Visitors' observations of the campaign in order to help identify successes, issues and lessons to be learned.

#### 3.3.4 Cost Benefit Analysis

NHS GGC carried out a Cost Benefit Analysis of the project in comparison to the ENT treatment costs incurred by injuries from liquitabs. This involved providing costs from ENT on the injuries sustained by treatment in comparison with the preventative cost and spend to purchase the safety packs which included a cupboard catch and information.

#### 4. Evaluation Results

#### 4.1 Awareness Levels of Liquitabs

Overall the evaluation found evidence that families' awareness of liquitabs products increased as a result of the campaign. Table 6 shows awareness levels, as found in the Baseline Survey, over the year of the campaign. After the first three months, awareness levels increased by 6% and remained constant throughout the remainder of the year.

Furthermore, semi-structured interviews carried out 9 months after the launch of the campaign found a 75% awareness level. When compared to the Baseline Survey for the first month of the campaign, this constitutes a 10% increase in general awareness.

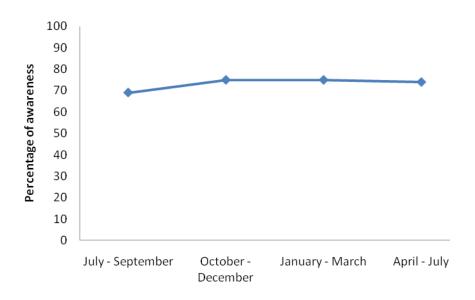


Table 6: Baseline survey results of awareness levels of respondents over the campaign year in percentages (n = 1739)

## Summary

The campaign appears to have succeeded in raising awareness of liquitabs by 10% in the NHS GGC Health Board area.

#### 4.2 Behaviour of Families around the Products

#### Parents' Behaviour and Storage of the Product

The Baseline Survey found that more than half of respondents stored household cleaning products (e.g. liquitabs and kitchen cleaners) in an unsecured cupboard within reach of children before receving a pack and having a conversation about the issue with the Health Visiting team.

#### These can be shown in the tables 7 and 8 below:

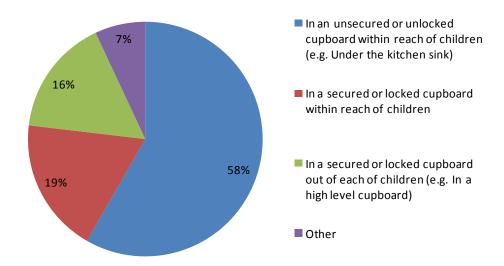


Table 7: Responses to the question "Where do you currently store your household cleaning products e.g. liquitabs and kitchen cleaners?" (n = 1738).

There was not a clear trend of storage by age of the participants.

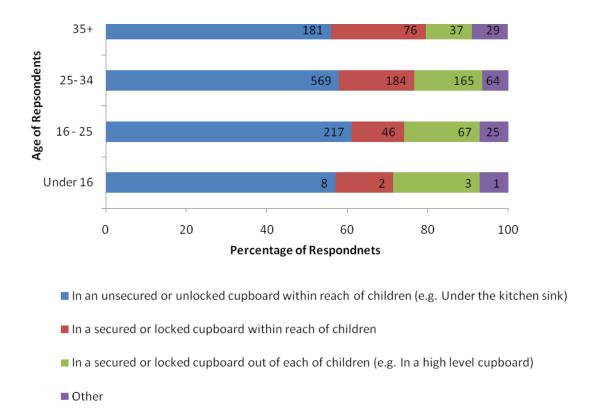


Table 8: Responses to the question "Where do you currently store your household cleaning products e.g. liquitabs and kitchen cleaners?" (n = 1674) by percent

In semi-structured interviews 9 months into the campaign, some evidence was found for changes around behaviour and storage of cleaning products such as liquitabs.

40% noted that since the start of the campaign, they had fitted the free latch from the information pack in order to keep household products locked away from their children. This suggests an increase in awareness and positive implementation of the practical preventative measures that were made available to them.

Respondents who had not fitted the latch still gave relatively positive and promising responses including:

Locks and latches were already installed in the kitchen to prevent children from gaining access

The child was still young and not mobile enough to reach for products.

#### Health Visitor's Views on Parents'/Carers' Behaviour

Health Visitors were asked about parents'/carers' awareness of the potential risks of liquitabs and their judgement on how helpful the packs would be in mitigating against these risks and changing behaviour.

Overall, 82% felt that most parents/carers saw the pack as being useful to help them mitigate against risks and 43% of respondents thought that most parents/carers were not aware of the potential risks of liquitabs.

Only 15% of Health Visitors (10 respondents) said that most parents/carers were already aware of the risks and had done something about them.

42% (28 respondents) said that while most parents/carers were already aware of the risks, they had not done anything about them (and felt the packs would help them in this). A further 40% (27 respondents) felt that most parents/carers were not aware of the risks but keen to do something about them using the packs.

#### This can be shown in Table 9 below:

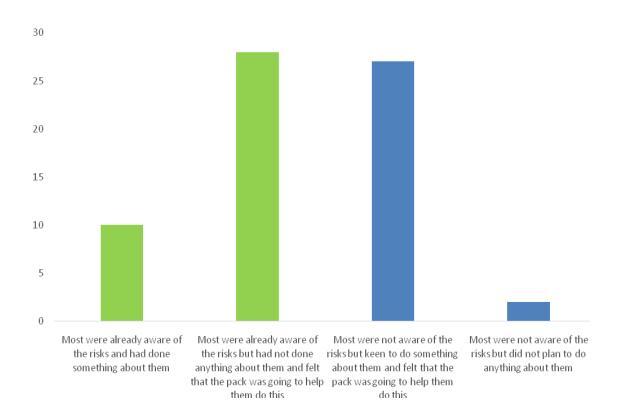


Table 9: Health Visitor responses to Parents'/Carers' awareness of risks of liquitabs and intentions for using the packs (n = 67)

## **Health Visitor Assessment of Changes to Parents Behaviour**

In the Health Visitor survey, respondents were asked about positive changes by parents/carers at their 12 month visit.

Only 48 people answered this question – lower than for other questions in the survey. This was partly explained by some final comments provided by those not answering this question, with some saying that they did not follow up at 12 months, in some cases due to not being in post long enough:

"Have not been following up at 12 months"

"I was unaware that I was expected to follow up at 12 months but Do discuss home safety again at this time"

Of the 48 who did answer, 5 respondents said that they felt no parents/carers had made positive changes, while 2 respondents felt that all parents/carers had made positive changes.

A range of other perspectives were given, but overall 60% of respondents (29 people) thought that 50% or more of parents/carers had made positive changes:

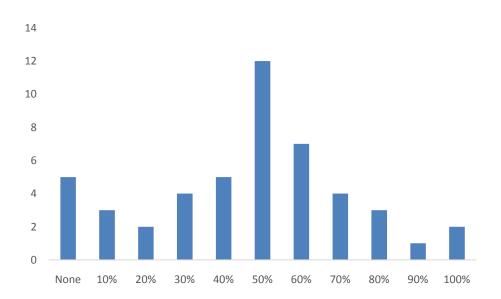


Table 10: Health Visitors assessment of percentage of parents/ carers who made postiive changes at 13 month follow up (n = 48)

#### Summary

Over half of the families in the baseline survey stored their products in an unsecured and unlocked cupboard. However, 82% of Health Visitors felt that the pack would help parents/carers become more aware and help to mitigate against the risks posed by liquitabs.

There is some evidence to suggest that this indeed happened and the campaign succeeded in changing the behaviour of some families/carers. For example, 40% of those in the one to one interviews subsequently fitted the lock after receiving it.

In addition, as many as 60% of Health Visitors felt that parents/carers had made positive changes when they revisited the family at their 12 month visit. This suggests that the campaign has made a positive impact and succeeded in making behavioural changes.

#### 4.3 Gather more data on self reported injuries related to liquitabs

The survey data found further data on injuries by liquitabs. 1 in 14 or 7% of parents (n= 1736) had at some point caught their child playing with a household cleaning product e.g. liquitabs or kitchen cleaning products.

There was no strong trend of age against this response.

It was then investigated whether there was any area that had particularly high rates of incidence of observation of a child playing with cleaning products. There was some variation between local authority areas with Glasgow City observing slightly more incidences

Local authority area	Proportion observed	Respondents
Glasgow City	9%	602
West Dunbartonshire	6%	232
East Dunbartonshire	5%	131
Renfrewshire and Inverclyde	5%	360
East Renfrewshire	5%	360

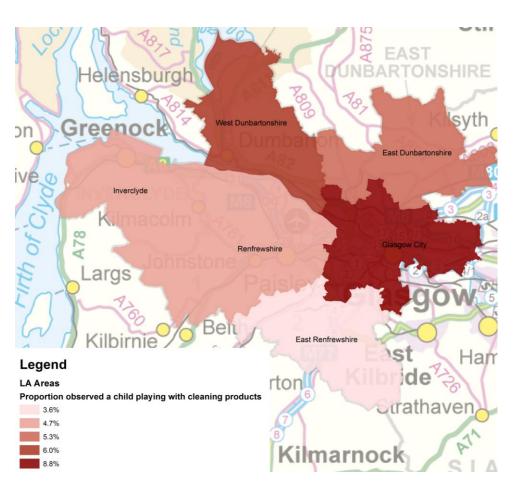


Table 11: Proportion of respondents in each local authority that had caught their child playing with household cleaning products

When looking more in depth into Glasgow City a higher proportion of parents/carers in Glasgow North West and Central had caught a child playing with such products. This can be seen below in table 12.

Glasgow Constituency	Proportion observed	Respondents
Glasgow North West	14%	181
Glasgow Central	10%	51
Glasgow South	7%	113
Glasgow North East	7%	148
Glasgow East	1%	75

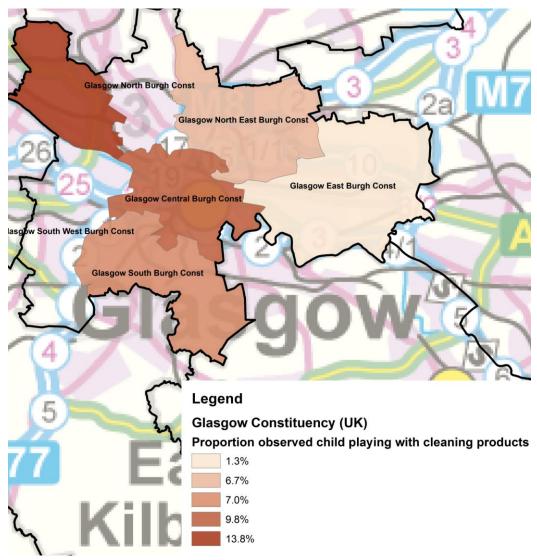


Table 12: Proportion of respondents in each Glasgow Constituency are who had caught a child paying with household cleaning products

The survey also found 1 in 23 respondents (or 4%, n = 1728) had observed a child swallowing a household cleaning product such as liquitabs.

It was then investigated whether there was any area that had particularly high rates of incidence of observation of a child swallowing cleaning products. There was some notable variation between local authority areas.

Local authority area	Proportion observed	Respondents
West Dunbartonshire	12%	232
East Renfrewshire	4%	223
Glasgow City	3%	602
Renfrewshire and Inverclyde	3%	360
East Dunbartonshire	2%	131

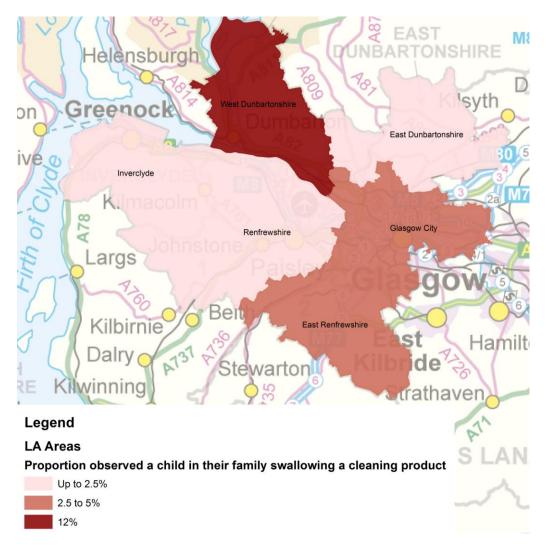


Table 13: Proportion of respondents in each local authority area who had a child in their family swallow a household cleaning product

When looking more in depth into Glasgow City, a particularly high proportion of parents/carers in Glasgow South appeared to have caught a child playing with such products. This can be seen below in table 14.

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Glasgow Constituencies	Proportion observed	Respondents
Glasgow South	10%	113
Glasgow North West	3%	181
Glasgow Central	2%	51
Glasgow North East	1%	148
Glasgow East	1%	75
Glasgow North Burgh Const  Glasgow Central Burgh Const  Iasgow South West Burgh Const  Legend	Glasgow East Burgh Const	2a MIZ

Table 14: Proportion of respondents in each Glasgow Constituency who had caught a child swallowing a household cleaning products

Proportion observed a child in their family swallowing a cleaning product

Glasgow Constituency (UK)

Up to 2% 2-3% 10%

#### **Summary**

1 in 14 parents had caught their child playing with household cleaning products like liquitabs. Glasgow City observed slightly high incidences – with the North West and Central having the highest rates.

1 in 23 respondents had observed a child swallowing a household cleaning product like liquitabs. West Dunbartonshire saw the highest rates of incidence.

#### 4.4 Providing families with help to prevent injuries

## Families Views of usefulness of the pack

Overall 16000 information packs were distributed across the NHS GGC Health Board area. Face to face interviews also found useful information in relation to this objective. For example, 100% of respondents confirmed that they had received more information on the issue and had a further discussion with their Health Visitor about the issue of liquitabs and potential poisoning risks.

Parents and carers felt the information pack was useful to have and increased their knowledge on the subject. For example, most parents found the pack useful,

"good, (I) have liquitabs and kids get into everything so it's really good"

"Useful information"

#### Health Visitor Views of Usefulness of the Pack

During the survey with Health Visitors, respondents were asked if they thought the information pack was useful for families. 70% found it either very useful or extremely useful, with only one respondent saying that they had not been useful at all.

#### This can be seen in Table 15 below:

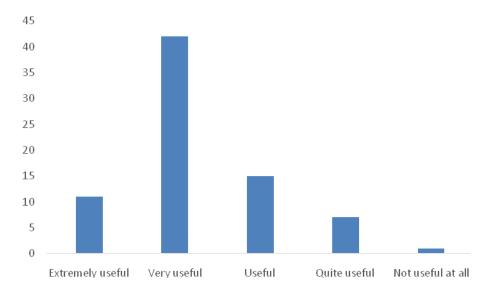


Table 15: Health Visitors responses to the usefullness of the Liquitabs pack (n = 76)

The pack itself was seen as useful for a number of reasons. Some respondents focussed on the resource itself, with remarks such as

"Very explicit, easy for clients to understand",

"Good free resource for families", and

"Clearly demonstrates the hazard to health and will keep [stay] in the parent's mind."

However, respondents were more likely to remark on the resource as being a good way of opening discussions on the dangers of liquitabs, and indeed on other similar hazards in the home:

"It gives an opportunity for the practitioner to raise the issue with the parent and then give something practical to them to fit to their cupboard"

"allows discussion regarding safety and can be given to families who have very little money"

"It allows us to have a dialogue about safe keeping of other household products & medicines etc"

The few respondents who said the resource was only quite useful had some concerns over lack of training (x1 respondent) and issues around whether the locks were being distributed or used (x3 respondents),

"Very small screws enclosed which are a safety hazard. Only a certain shape of cupboard can be used to fit it to."

"Found some devices stuck in a cupboard and unsure if others have been given out."

#### Areas of Usefulness of the Packs

Health Visitors were asked supplementary questions about the four different ways in which the packs were useful. Respondents gave similar responses for all four areas, with seven or fewer respondents saying that they disagreed with any of the statements. Helping parents understand the risk was deemed a particularly useful aspect of the packs:

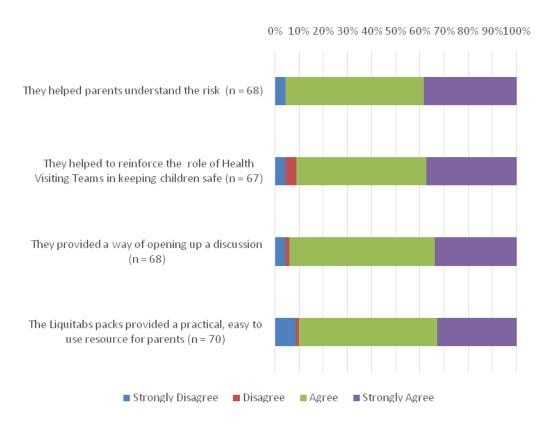


Table 16: Health Visitor responses to the four aspects of usefulness of the Liquitab packs

Probing into the detail of the packs, 86% (62 of 72 respondents) said that they contained everything that a parent would find helpful, while 14% said that they could be improved. Most of these focussed on issues around the locks:

"Maybe include more than one lock as many cupboards where parents store such products are double cupboards"

"Could contain more cupboard locks"

"Not sure that people use the catch. Is it the normal standard of safety catch that would be found in for example Mothercare? If it isn't, suggest not having it and simply have the coloured leaflet."

"Flimsy drawer/cupboard lock"

#### Summary

Families interviewed 9 months after the start of the campaign viewed the information pack as helpful and useful.

70% of Health Visitors felt the pack was very useful or extremely useful. Many commented that they felt the pack was a good vehicle for opening up discussions on home safety. This was subsequently confirmed by families interviewed in the one to one sessions who elicited that the pack led to further conversation with their Health Visitor.

The majority of Health visitors felt that the pack contained everything a parent or carer would need. 14% believed it could be improved with better or more locks.

#### 4.5 Injury data

Baseline data from Yorkhill identified that prior to the campaign there had been nine serious admissions to Yorkhill Hospital as a result of ingestion of liquitabs.

In contrast, over the 12 month period in which this project ran (July 2013 – July 2014), only 1 admission to Yorkhill was recorded<sup>3</sup>.

This case took place in the first month of the campaign (July 2013). There may be a connection between this fall in admissions and the campaign and it will be important to review admissions in future years to see if this is sustained, which will enhance confidence in the creation of a sustained benefit from the campaign.

#### **Summary**

The year during which the campaign was running saw a reduction of admissions related to liquitabs ingestion to Yorkhill Hospital from 9 to 1 compared with the pre-campaign year.

<sup>&</sup>lt;sup>3</sup> 1 further admission was recorded but has been excluded from analysis because the resident lived out with the campaign and board area.

#### 4.5 Cost Benefit Analysis and Implementation

#### **Implementation**

Overall the campaign was implemented with ease. According to the survey carried out with Health Visitors, 91% (64 of 70 respondents) said that they had found the information pack easy to distribute. A number of recommendations were given around how distribution could be made easier:

"Having them in GP surgeries while at clinics"

"Let everyone know who is responsible for ordering"

"Have a set time to give it out at. First visits can be too busy and too early"

"Someone else to distribute them"

"Different distribution network rather than HV"

"Allocate a box for each HV or GP practice"

This suggests that the campaign was easy to implement and Health Visitors were happy to incorporate it into their everyday work. A further 94% (66 of 70 respondents) said that it would be useful to have a continuing supply of the information packs for them and their team.

#### **Cost Benefit**

NHS GGC carried out a cost analysis as part of this project. Below is a table showing the estimated costs of treatment due to liqutiabs:

Table 17: Treatment Costs			
Item	Cost (£)		
Paediatric Intensive Care Unit (PICU)	£2311 / day		
Ward	£1200 / day		
Ear, Nose and Throat (ENT) surgery	£1030 / hour		
PICU transfer / retrieval journey	£1820		

(Supplied by Women & Children's Division, NHS GGC)

The overall estimated average cost of one injury was £19,500. This estimate was based on nine cases treated by the Ear, Nose and Throat department and excludes other departments and specialities.

Of these 9 patients, the shortest stay was three days resulting in cost to the NHS of roughly £4711. On the other hand, the longest stay was for 27 days resulting in costs to the NHS of roughly £63,890<sup>4</sup>. These costs exclude A & E and wider societal costs.

Preventative measures on the other hand are inexpensive. The average cost of the safety pack involved in this campaign was £0.66 as can be seen below:

Table 18: Preventative measure cost			
Item	Cost of resources (£)		
Cupboard catch	£0.49		
A5 leaflet with fitting instructions	£0.05		
A5 evaluation sheet	£0.01		
Bags with safety labels/storage boxes	£0.04		
Assembling packs	£0.07		
Total	£0.66		

This suggests that one safety pack at £0.66 has the potential to prevent the average cost to the NHS of a liquitabs injury of £19,500. The benefits of cost and of time to hospital staff therefore justify the preventative measure used in this campaign.

In comparison to the baseline data which saw 9 admissions, only 1 admission to Yorkhill Hospital was recorded for liquitab ingestion from within NHS GGC over the campaign.

The estimated cost benefit of this can be seen below:

Table 19 : Investment return			
Campaign costs	£12,000		
Average cost of 1 case	£19,500		
Estimated Costs saved	£144,000		

Note: this analysis is based upon average costs of £19,500 per case. It does not include any A & E costs or wider societal costs. The campaign cost to NHS is based upon one admission and the overall campaign costs (=£12,000).

The potential saving to the NHS through this inexpensive campaign is therefore clear.

<sup>4</sup> Nish, L., Stone, D., Kubba, H. & Lumsden, E. Liquitabs (liquid pods) for washing machines or dishwashers: an avoidable and costly risk to child safety, 2014.

#### Summary

The campaign was easily implemented according to Health Visitors.

94% of Health Visitors said they would like to have a continuing supply of the information packs.

The campaign saved the ENT department, on average, £144,000.

#### 5. Conclusions

The "Not for Play" campaign was an initiative aimed at tackling the growing concern of liquitab ingestion injuries to children in the NHS GGC health board area. The campaign involved a multifaceted approach to raise awareness of the product as well as prevent injuries.

The campaign has been extremely successful in a number of different ways and has met and completed each of its objectives.

Firstly, the campaign sought to raise awareness of the dangers of liquitabs. Semi structured interviews carried out 9 months after the launch of the campaign found a 10% increase in awareness in comparison to the first month of the campaign. This suggests a clear increase in awareness across the board area.

Secondly, the campaign sought to scope out the behaviour of families and carers around the products. The evaluation found that over half of the families in the Baseline Survey stored their household cleaning products in an unsecured and unlocked cupboard. This suggests that the campaign was well placed to tackle this issue and when asked, 82% of Health Visitors felt that the pack would help parents/carers become more aware of the issue. Behaviour was shown to have changed throughout the campaign regarding the potential dangers of cleaning products. For example, 40% of those interviewed 9 months into the campaign had installed the cupboard catch whilst as many as 60% of Health Visitors reported positive changes being made when they revisited the family at their 12 month visit. This suggests an important impact in the behaviour of families/carers around the topic with many families becoming more aware and taking precautionary and preventative measures.

Thirdly, the campaign hoped to gain further self reported data on the issue. The evaluation found useful and information regarding this. For example, 1 in 14 parents had at some point caught their child playing with a household cleaning product. This was largely observed in Glasgow City – particularly the North West and Central areas. Additionally, one in 23 parents had previously caught their child swallowing a household cleaning product. This was largely observed in West Dunbartonshire. This self reported data provides useful geographical insight which could be used for any future targeted approaches.

The forth objective was to provide families with help and information to prevent injuries. The evaluation found the campaign to be useful to both families and Health Visitors. Families interviewed 9 months after the start of the campaign felt the pack was helpful to them and provided them with useful information. Similarly, Health Visitors felt the pack was useful and helped them talk about other home safety issues with the family. Up to 94% of Health Visitors wanted to have a sustained supply of the information packs and see the campaign continue.

The fifth objective of the campaign was to reduce the number of injuries being presented to Yorkhill hospital. During the period of the campaign the number of ingestion related admissions fell from 9 (pre-campaign year) to 1. This admission took place in the first month of the campaign and since then, no cases have been reported.

The last objective of the campaign was for it to be carried out in an effective and cost efficient way. The evaluation found the campaign was implemented with ease and with cost benefit. Health visitors found the pack easy to distribute and wanted further supply. A Cost Analysis found that over the course of the campaign, the average costs saved by the NHS ENT department was around £144,000. This does not cover A & E costs or wider societal costs.

Overall, the benefits of this campaign have been impressive. The campaign has succeeded in raising awareness, changing behaviour, gathering further data, reducing injuries and doing so in a helpful, useful and cost beneficial way.

#### Appendix 1

Four digits of respondents' postcodes were requested in the survey. Most respondents provided 4 digits, while some provided fewer. Postcodes were provided almost exclusively in the G and PA postcode zones.

To promote statistical significance (by reporting on broader geographies), this analysis focussed on Local Authority areas, such as Glasgow City, and on (UK) Parliamentary Constituencies in Glasgow, such as Glasgow North West.

For PA postcodes, four digits is insufficient to uniquely identify the postcode district and therefore the Local Authority area (ie PA14 might refer to the PA14 postcode area but could refer to PA1 postcode area). Based on RoSPA's knowledge that respondents with a PA postcode were either in Renfrewshire or Inverclyde, all PA postcodes were assigned to Renfrewshire & Inverclyde for reporting purposes.

For G postcodes, a four digit postcode is sufficient to uniquely identify the postcode district and therefore both the Local Authority area and Constituency (eg, G133 represents the G13 postcode area whereas G13A would represent the G1 postcode area). For postcodes provided with fewer than four digits, these were checked against current G postcodes to find a unique match and, where that was not possible, the original handwritten survey forms were checked to assess the correct postcode district. Finally, postcode districts in North Lanarkshire and South Lanarkshire were collated with the "other" category, as the focus areas were Glasgow City, Renfrewshire and Inverciyde, West Dunbartonshire, East Dunbartonshire and East Renfrewshire.