Growing Pains

Improving Inpatient Paediatric Growth Chart Reviews

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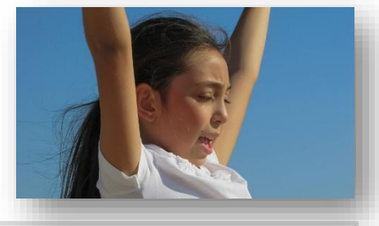


Doctors do not routinely check growth charts of children admitted to the ward. This is a missed opportunity for health promotion. Avoiding early, honest discussions risks greater harm to children's wellbeing.

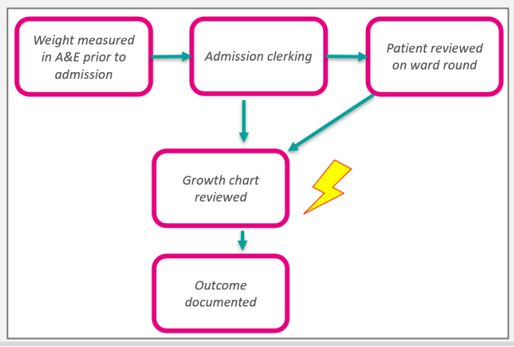
BACKGROUND

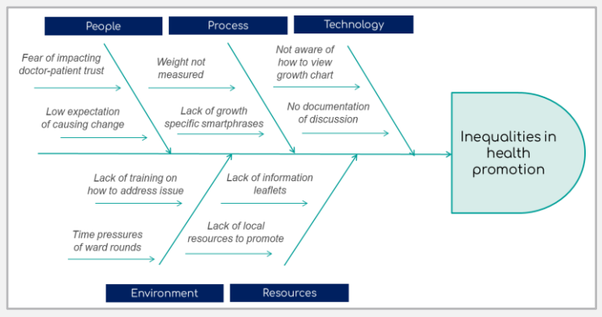
Growth charts are checked in fewer than 2/10 inpatient admissions. Even when issues are recognised, staff are often hesitant to raise this sensitive topic.

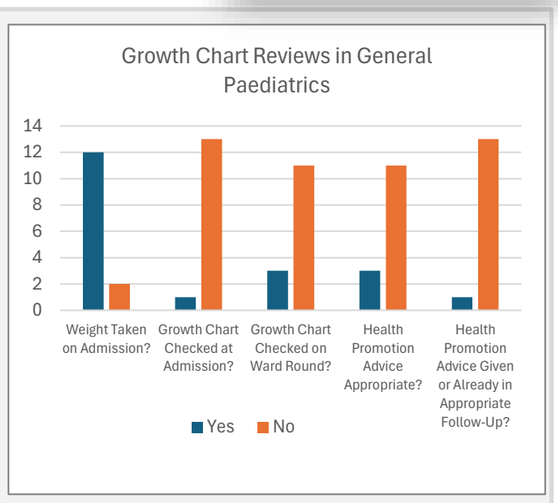
While patients may not see an immediate impact, every healthcare encounter is a chance for health promotion. Consistent conversations build momentum for change, helping shape a healthier future population.

Childhood obesity remains a major concern. In 2022, NHSE reported that 15% of children aged 2–15 were living with obesity, and 27% were overweight (including obesity)[1]. Meta-analyses showed that 55% of children with obesity remain so into adolescence, and 80% of adolescents continue into adulthood—raising long-term risks of hypertension, heart disease, stroke, and cancer[2].

DIAGNOSTICS







AIM & MEASUREMENT DEFINITION

Aim
Improve the frequency of weight growth charts reviewed in our general paediatrics department from 2/10 to 8/10 by March 2026.

Chosen measure
Collated score out of 3 generated after 24 hours for each new admission, 1 point for each of:
1) Weight measured at admission
2) Growth chart review documented within 24 hours
3) Interpretation of growth chart review documented +/- next steps required

Inclusions
Children admitted under general paediatrics at Evelina Children's Hospital.

Exclusions
Children under care of specialties teams as lack of stakeholder influence.

Sampling method and frequency
Identify each new general paediatric admission and collect data on the above. Collection can be done retrospectively by analysing admission logs. Weekly random sampling of 5 patients to assess against chosen measure.

CHANGE IDEAS

WEAK ACTIONS

Your ideas (weak actions)
Staff education session

Posters in doctors' office

Stickers on laptops

Laminated bedside prompt cards

MODERATELY STRONG ACTIONS

Your ideas (moderately strong actions)
EPIC Smartphrase

Patient leaflets on obesity/falling growth made accessible

STRONG ACTIONS

Your ideas (strong actions)
Prompt included automatically in admission clerking

Weight checking days – e.g. Mon/Wed/Fri

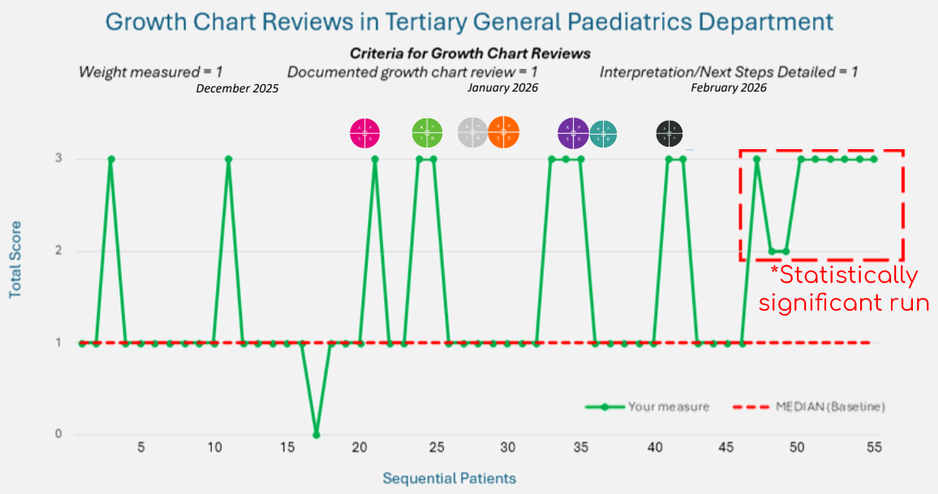
Allocated "growth chart checker" at handover

Include growth checks in safety huddle checklist

PDSA cycles

PDSA Test #	PLAN	DO	STUDY	ACT
1.1 12/01/26	Education session on reviewing growth charts and the local resources available to redirect to.	Morning handover staff education session given to general paediatrics team consisting of 4 SHOs, 1 registrar and 2 consultants	Not all of paediatrics team present at handover Initial increase to 3/5 patients, tailed off as clinical team changed	**Adapt** – reminders act as effective initial education but need to reach wider team
2.1 16/01/26	3 separate posters provided for general paediatrics team to vote on	Stickers provided to doctors to vote on posters with different themes: simple, positive vs negative reinforcement	More team members engaged with voting, but no significant change in growth chart checking rate	**Extend** – engaged interest, with further advertisement may progress to change
2.2 26/01/26	Email with results from poster competition and reinforcing growth chart reviews	Email sent with "Gabby the Giraffe", the chosen poster with 7 votes.	Positive feedback from consultants that liked poster. Several engaging after surprised not already being checked.	**Extend** – distribute posters further, emails reported as best modality to receive information
2.3 01/02/26	Posters printed and scattered around general paediatric ward	5 laminated posters postered within doctors' office, ward and bathroom.	No change in rates of checking, and doctors reported not noticing	**ABANDON** – No apparent effect and reported poster blindness
3.1 23/01/26	WhatsApp reminder to check growth charts	WhatsApp sent to medical team	Short term impact, but not every doctor reported reading text	**ABANDON** – Short-term gain only, email reported as more effective medium for updates
4.1 04/02/26	Shown draft for paediatric admission template to consultant, which includes growth chart review prompt	Shown to general paediatric consultant on call – EPIC smartphrase ".paedsadmit"	Positive feedback liking paediatric-specific aspects	**Extend** – implement admission template
4.2 10/02/26	Paediatric admission template shared with wider paediatric team	At morning handover demonstrated to team smartphrase, and WhatsApp follow-up sent to team	Positive feedback amongst team, particularly as no paediatric admission template currently exists so team feel may streamline their documentation. **Sustained change***	**Extend** - continue doing this, consider creating further template for ward round

RUN CHART



CONCLUSIONS

There was a statistically significant increase in proportion of children having their growth chart reviewed by March 2026, as demonstrated by 9 consecutive data points above the median on the run chart. Our baseline measurement of 2/10 patients having growth chart reviewed improved to 9/10, exceeding our project aim of 8/10 patients.

Baseline 2/10 → *in final 2 weeks 9/10 patients had growth chart reviewed*

There was a shift in process after initial PDSAs were introduced. Statistically significant sustained change occurred once computerised aids were introduced. This has resulted in a permanent change to the Evelina admission template. Further work is needed to ensure this translates into health promotion.

REFLECTIONS & LEARNING

- Reminders cause brief changes and are an essential contributing factor to problem engagement, but to sustain change the most effective methods involve automations or systems changes
- Colleague feedback and commitment is essential to ensure changes implemented are effective
- Small and measurable changes are essential to delineate which changes are successful

References:
1. NHS Digital (2024) *Health Survey for England 2022, Part 2: Children's overweight and obesity*.
2. Simmonds, M., Llewellyn, A., Owen, C.G. and Woolacott, N. (2016) 'Predicting adult obesity from childhood obesity: a systematic review and meta-analysis', *Obesity Reviews*, 17(2), pp. 95–107.

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