Results From England’s 2014 Report Card on Physical Activity for Children and Youth

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Background: The Active Healthy Kids 2014 England Report Card aims to provide a systematic assessment of how England is performing in relation to engaging and facilitating physical activity (PA) in children and young people. Methods: The systematic methods and processes that underpin the Active Healthy Kids Canada Report Card were used and adapted. Data and evidence were consolidated, reviewed by a panel of content experts, and used to inform the assignment of letter grades (A, B, C, D, F) to 9 core indicators related to PA. Results: Children’s Overall Physical Activity received a grade of C/D. Active Transportation and Organized Sport Participation received grades of C and C-, respectively. The indicators of School and Community and the Built Environment were graded favorable with grades of A- and B, respectively. Active Play, Sedentary Behaviors, Family and Peers, and Government Strategies and Investments were graded as INC (incomplete) due to a lack of nationally representative data and/or as a result of data not mapping onto the benchmarks used to assign the grades. Conclusions: Substantial provision for PA opportunities in England exists. Yet more effort is required to maximize use of these resources to increase PA participation.

Keywords: exercise, sedentary behavior, family and peers, built environment, adolescent, active transport

The World Health Organization identifies physical inactivity as the fourth leading risk factor for global mortality. Physical inactivity is also a major economic burden with related ill-health estimated to have cost the National Health Service £0.9 billion in 2006–07. Recent data suggest that significant proportions of children and adolescents in England do not meet the current recommendation of at least 60 minutes of moderate to vigorous intensity physical activity (MVPA) per day. Indeed, 67% of boys and 79% of girls in England aged 4–15 years do not accrue enough activity for health benefit.

Empirical studies show many factors operating at differing levels of influence (eg, individual, social, physical environment, and policy) affect the physical activity (PA) of children and young people. Given this complexity for promoting PA among children and young people, a nationally representative tool that provides an ongoing and systematic interpretation of current data on a number of key PA surveillance indicators is needed. Among numerous benefits, such a ‘knowledge translation instrument’ will be able to improve current and ongoing understanding of national PA trends, raise awareness of the state of PA provision, inform evidence-based practice for children and young people in England, assist with policy development, and guide investment and research strategies. With these issues in mind, Active Healthy Kids England (www.activehealthykidsengland.co.uk) was created in 2014 to provide a “state of the nation” resource on how England is performing in regard to provision of, and support for, PA opportunities for children and young people. This paper presents the key findings of the inaugural Active Healthy Kids England Report Card.

Methods

The 2014 Active Healthy Kids England Report Card was developed and produced by the Chief Scientific Officer (first author) of Active Healthy Kids England, a Scientific Officer (second author), and a Research Work Group (RWG) consisting of researchers from 4 English Universities (the remaining 4 coauthors). The Chief Scientific Officer’s responsibilities involved acquiring the funding, forming a RWG, producing the short form of the Report Card, dissemination of the Report Card, and creating a media strategy. The Scientific Officer was responsible for identifying key articles, gathering available evidence, and producing the final long form version of the Report Card. Members of the RWG were responsible for working with the Chief Scientific Officer and Scientific Officer to provide content expertise for the assigning of grades to each of the core PA indicators.

Nine core indicators were assessed and the procedures followed were those used by the Active Healthy Kids Canada Report Card model:

1. Overall Physical Activity Levels
2. Organized Sport Participation
3. Active Play
4. Active Transportation
5. Sedentary Behaviors
6. Family and Peers
7. School
8. Community and the Built Environment
9. Government Strategies and Investment

Several sources of national data were used to inform the grades of each PA indicator, including the 2008 and 2012 Health Survey for England (HSE)4,6; Millennium Cohort Study (MCS)7,8; Health Behaviour in School-aged Children (HBSC; 2010) England Report9,10.
Tellus 4 National Report; The PE and Sports Survey; The National Travel Survey (NTS); the School Census; and an Ipsos Mori Omnibus Survey on sports participation. Where national data were not available, the SPEEDY (Sport, Physical activity and Eating behavior: Environmental Determinants in Young people) study was used to help inform discussions.

The RWG worked collaboratively to evaluate available data. The HBSC (2010) were included. Data from these surveys supported the assignment of a D grade, given the lower proportion of children and particularly adolescents, providing self-reported data related to meeting current PA guidelines. Organized Sport Participation and Active Transportation were graded C- and C, respectively. Grades for Active Play and Sedentary Behaviors could not be assigned and were recorded as being INC in the 2014 Report Card due to a lack of nationally representative data and/or the absence of an appropriate benchmark because there were currently no specific government guidelines for either indicator.

Both the School (A-) and Community and the Built Environment (B) achieved high grades due to 1) a large proportion of schools allocating 2 hours of Physical Education (PE) lessons, the provision for additional opportunities for PA, and 3) sufficient accessibility to parks, playgrounds, and sports facilities in the community. However, use of such facilities was reported as being low. It was the lack of uptake of existing facilities that formed the overall theme of the 2014 England Report Card with the front cover (see Figure 1) designed to illustrate this point.

The Family and Peers indicator was graded as INC as 1) there are no national data on the proportion of parents who actively encourage participation via coaching, volunteering, providing transport, paying fees and/or for equipment; and 2) there are insufficient nationally representative data on peer support for physical activity. The indicator of Government Strategies and Investment was also graded as INC. Many policies, strategies, and funds were in place; however, the success and impact of these policies were unclear.

### Results

The 2014 Active Healthy Kids England Report Card is the first annual assessment of how well England is performing on 9 core indicators related to physical activity in children and youth. Grades awarded to each indicator are presented in Table 1.

Overall Physical Activity Levels were graded as C/D. The C reflected a higher proportion of younger children achieving PA guidelines whereas the D referred to a lower proportion of adolescents doing so. This grade was influenced by the quality of data available to inform this indicator. Specifically, the MCS provided the highest quality data (in terms of sample size, sampling strategy, and objective measures of PA employed) though data were only available for 7 to 8 year old children. As the grade for this indicator should reflect children of all ages, data from the HSE (2008) and the HBSC (2010) were included. Data from these surveys supported the assignment of a D grade, given the lower proportion of children and particularly adolescents, providing self-reported data related to meeting current PA guidelines.

### Discussion

It was possible to create a Report Card for England’s state of the nation in relation to providing PA opportunities for children and young people. Assigned grades, however, varied among indicators.

### Overall Physical Activity Levels: C/D

Data from the MCS showed that 50.9% of 7- to 8-year-old children in England are meeting the current PA recommendations. These data were judged to be of a high quality due to the large sample

### Table 1 Grades According to Physical Activity Indicators in the 2014 English Report Card on Physical Activity for Children and Youth

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Grades</th>
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<tr>
<td>Overall Physical Activity Levels</td>
<td>C/D</td>
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<tr>
<td>Organized Sport Participation</td>
<td>C-</td>
</tr>
<tr>
<td>Active Play</td>
<td>INC</td>
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<tr>
<td>Active Transportation</td>
<td>C</td>
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<tr>
<td>Sedentary Behaviors</td>
<td>INC</td>
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<tr>
<td>Family and Peers</td>
<td>INC</td>
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<tr>
<td>Community and the Built Environment</td>
<td>B</td>
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<tr>
<td>School</td>
<td>A-</td>
</tr>
<tr>
<td>Government Strategies and Investments</td>
<td>INC</td>
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*Note. The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark: A = 81%–100%; B = 61%–80%; C = 41%–60%; D = 21%–40%; F = 0%–20%; INC = incomplete data.*
Regional differences within England were identified from the MCS7 underestimating overall PA levels. Undertaken outside of school was explored. Thus, these data likely adversely, did so according to self-reported data.9 Although data were collected more recently as part of the HSE (2012)6 work, only PA data,4 whereas 28% and 15% of adolescent boys and girls, respectively, showed that a lower proportion met current guidelines. Indeed, a C was appropriate for the 7- to 8-year-old range, data pertaining to a wider age range of children and particularly adolescents showed that a lower proportion met current guidelines. Indeed, via self-reported data boys were typically at a grade D whereas girls generally fall within grade F. Only 33% of boys and 21% of girls aged 4–15 years met the guidelines based on accelerometry data, whereas 28% and 15% of adolescent boys and girls, respectively, did so according to self-reported data.9 Although data were collected more recently as part of the HSE (2012)6 work, only PA undertaken outside of school was explored. Thus, these data likely underestimated overall PA levels.

In terms of the Overall Physical Activity Levels, several regional differences within England were identified from the MCS7 data. The region with the largest proportion of children meeting government PA recommendations was in the North West of England (57.8%), whereas the region with the lowest percentage achieving the government target was the Midlands (46%).7

Ongoing nationally representative PA data collected via objective means across age groups are needed to better inform our understanding of the prevalence and trends in PA engagement among children and adolescents. Such data would also permit the identification of high and low performing regions.

**Organized Sport Participation: C-**

Data from the Ipsos Mori Omnibus Survey14 provided the basis for the assigned grade. These data showed that 57% of 5- to 16-year-olds reported participating in organized sport outside the school day on at least 1 occasion during the past week. The assignment of this grade was further supported by data from the HSE (2012)6 in which it was reported that 48% of boys and 38% of girls aged 2–15 years participated in formal sport on at least 1 day in the past week. This indicator was influenced by various disparities including gender [ie, boys were engaged more than girls; HSE (2012)6] and particularly socioeconomic status. With the latter in mind, a consistent finding from an array of surveys was that children from more affluent families were more likely to participate in organized sport and to participate more frequently than those from disadvantaged backgrounds.6,8,10,14,18 In view of these disparities, a minus was added to the grade such that the overall indicator grade was a C-.

It is important to note that the benchmark used to assess this indicator was not specific in regards to an acceptable amount of organized sport participation per week; hence, the data used related to engaging in sport on at least 1 occasion. Further research is required if we are to better understand how much sport per week is desirable as well as to tease out participation in sport and PA clubs (ie, to obtain a better understanding of the type of organized activities that children in England are engaged with).

**Active Play: INC**

There is currently a lack of robust and nationally representative data pertaining explicitly to active play. Moreover, no specific guidelines for active play exist. Thus, it was not possible to assess this indicator in the 2014 Report Card due to the absence of a suitable benchmark. To provide a benchmark in the future, the following questions need to be answered: What is the nature of active play within and across different age groups? How can it be best measured? How much is enough? What age groupings should we look to include given documented age-related declines in reported play behavior?18,19

**Active Transportation: C**

Taken collectively, results from the NTS,12 School Census13 and HSE (2012)6 supported the assignment of a C grade based on the proportion of children who use active means of transport (ie, the combined proportion of children who walk or cycle) as their usual mode of travel to/from school. For example, 42% of trips to and from school made by children aged 5–16 years in England in 2011–12 were by foot and 2% by bicycle.12 However, it was discouraging to see that a low percentage of children cycle to/from school, which has been consistently reported6,13 and has remained low since 1995–97,20 despite various funding and strategies to encourage cycling in England (eg, “Bikeability” cyclist safety training for children21). In terms of active transport to nonschool destinations, results from the SPEEDY study16 showed that 61% of girls and 45% of boys traveled to parks by foot and 58% of girls and 49% of boys traveled to see friends by foot. These findings were based on regional data as the SPEEDY study recruited children living in Norfolk only. However, this is the only available data on this benchmark and highlights the need for nationally representative data on active transportation that is not related to school (eg, shopping, meeting friends, etc.).

**Sedentary Behaviors: INC**

Similar to active play, there are no specific recommendations for sedentary behavior in England (or the wider UK) because there is...
currently not enough evidence to provide a precise time limit for sedentary behavior.22 Accordingly, there is much work to be conducted regarding the nature and determinants of sedentary behaviors before a grade can be assigned with confidence to this important core indicator.23

**Family and Peer Influence: INC**

The indicator of Family and Peer Influence was assigned a grade of INC. Specifically, there are no national data regarding parental support for PA (eg, the proportion of parents who help to pay for fees/equipment, transport their children, coach sports and volunteer, etc.). Equally, peer influence could not be graded due to insufficient data. Future research on children’s perceptions on the role of their peers with regard to supporting physically active behavior is required.

**School Influence: A-**

The A- grade assigned to the School indicator reflects the overall average of grades given to 3 aspects of the school environment that underpin this overall core indicator:

1. **School PE**: Self-reported data provided by schools on the proportion of pupils participating in at least 2 hours of curriculum PE per week from 2003–04 to 2009–10 were used to guide the grade assignment (from the PE and Sport Survey11). Yearly improvements were shown with a large proportion of schools allocating 2 hours of PE by 2009–10: 84% of children in years 1–11 were reported to participate in 2 hours of school PE per week (92%–95% in years 1–6 and 82%–90% in years 7–9, though this declines to 51% in year 10 and 47% in year 11).11 As such, schools seem to be allocating 2 hours of PE and accordingly this benchmark was awarded an A- (with the “-” reflecting the low proportion of year 10 and 11 pupils participating in this amount of PE). Although evident from this grade that as a nation we are improving provision for school PE, we do not know how active children are during the lessons. Future work on this issue is warranted.

2. **School Policy and Investment**: It was not possible to grade funding and policies as we do not know the acceptable levels of each. Thus, the grade awarded for this domain was informed by data on the proportion of schools offering PA opportunities exclusive of PE. For example, 80% of participants (School Years 6, 8, and 10) involved in the Tellus 4 Survey reported doing something active during lunch or break time in the last week;10 49% and 78% of children in years 1–11 participated in interschool and intraschool competitive activities, respectively, according to the PE and Sport Survey.11 The majority of available data, therefore, fall within the B grade boundary, which is supported by other, albeit smaller/regional, surveys.15,26

3. **School Facilities and Equipment**: This indicator was graded as an A due to the fact that it is a statutory requirement for schools to provide suitable outdoor space to allow provision of PE lessons and to permit pupils to play outside.27 Moreover, according to a report conducted by Sport England,28 a large proportion of sports facilities in England were located within schools and other educational establishments (eg, 76% of sports halls, 73% of artificial grass pitches, 29% of swimming pools, and 52% of grass pitches).

**Community and the Built Environment: B**

This indicator was awarded a B overall to reflect the following grades given to the benchmarks which constitute this core indicator:

1. **Accessibility and use of parks, playgrounds and sports facilities**: 90.5% of parents in the UK who participated in the MCS8 reported that there are parks or playgrounds where their child can play where they live, and according to the Extended Schools Survey,17 71% of schools allowed public access to their sports facilities. Therefore, access to such spaces was awarded an A because the MCS data are of a high quality and the figures are more relevant to children’s access, whereas the Extended Schools Survey could be relevant to adult access to sports facilities as well. With usage in mind, however, responses provided to the MCS showed that fewer parents reported taking their child to a park or playground regularly (eg, 36.9% of mothers and 36.4% of fathers do so once or twice a week8), suggesting that although access is high, use of such spaces is not.

2. **Satisfaction with parks, playgrounds and sports facilities**: Data from the Tellus 4 Survey10 reported that 54% of young people thought that parks and play areas where they lived were either fairly or very good. However, this did not provide an indication of whether these respondents were actually satisfied with these areas or not, and there were no data available in relation to sports facilities. Thus, this benchmark was graded as INC.

3. **Perception of neighborhood safety**: 70% of HBSC (2010)9 participants endorsed the view that they felt safe in the local area where they lived and 63% agreed that it would be safe for younger children to play outside. However, answers to both questions differed by socioeconomic status, with young people from disadvantaged backgrounds less likely to report feeling safe than those from more affluent backgrounds.9 Consequently, a B- was awarded to reflect the socioeconomic disparity.

**Government Strategies and Investment: INC**

There are a number of policies that are in place which are relevant to children and young people’s health. According to Brunton et al,25 children and young people’s PA promotion was given a high priority within the UK. However, this report was published in 2003 and on a thorough review of the various departments that play a role [ie, Department of Health (DoH); Department for Transport (DfT); Department of Education (DoE); and Department for Culture, Media, and Sport (DCMS)], very few policies were related to PA specifically. From a list of 18 policies within the DoH, for example, the most relevant were ‘Reducing obesity and improving diet’ and ‘Giving all children a healthy start in life.’30 Relevant strategies within these included guidance on how much PA young people should be doing and the Change4Life program,31 a social media campaign designed to give advice on how children can eat healthily and move more. Recent funding has been announced to expand Change4Life Sports Clubs to promote Street Play (encouraging children to play on their streets safely) and for walking initiatives.32 In addition, the DfT are investing in cycling in England which includes cycle safety training for children21 and funding for primary school sport has been released.33

Overall, these strategies and level of investment are promising, though a grade could not be awarded because the success and impact of the strategies and policies on increasing PA participation is unclear (ie, systematic and robust evaluation is needed). Further, it was not possible to grade ‘Government Investment’ because it was deemed unfeasible to provide a benchmark according to an amount of funding considered acceptable.
Limitations

Although grades were awarded based on the best available data, future iterations of the Report Card would benefit greatly from a stratified and targeted survey designed specifically to address the 9 core indicators and associated benchmarks (ie, so as to overcome a number of gaps in the extant literature that led to the awarding of INC grades). As part of this work, ongoing and nationally representative monitoring of objectively assessed PA data in England is needed.

Conclusion

There is substantial provision for PA opportunities in England, but more effort is required to maximize use of the existing resources to increase PA participation, monitor progress, and subsequently improve the grades awarded to PA behaviors. An emphasis on improving family support for children’s PA is essential and parent-child interventions may offer a valuable route to tackling both adult and child PA levels. Lastly, there are a number of pressing areas for future work. A number of these have been highlighted in this brief report.

Acknowledgments

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Notes

1 It is not statutory for schools to provide 2 hours PE per week; this was the target set by the previous Government and subsequently measured using the PE and Sport Survey. As the survey was discontinued, there is no longer an ongoing assessment of PE and sport participation in schools.

References


