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# Covid-19 pandemic and Health Economics in France

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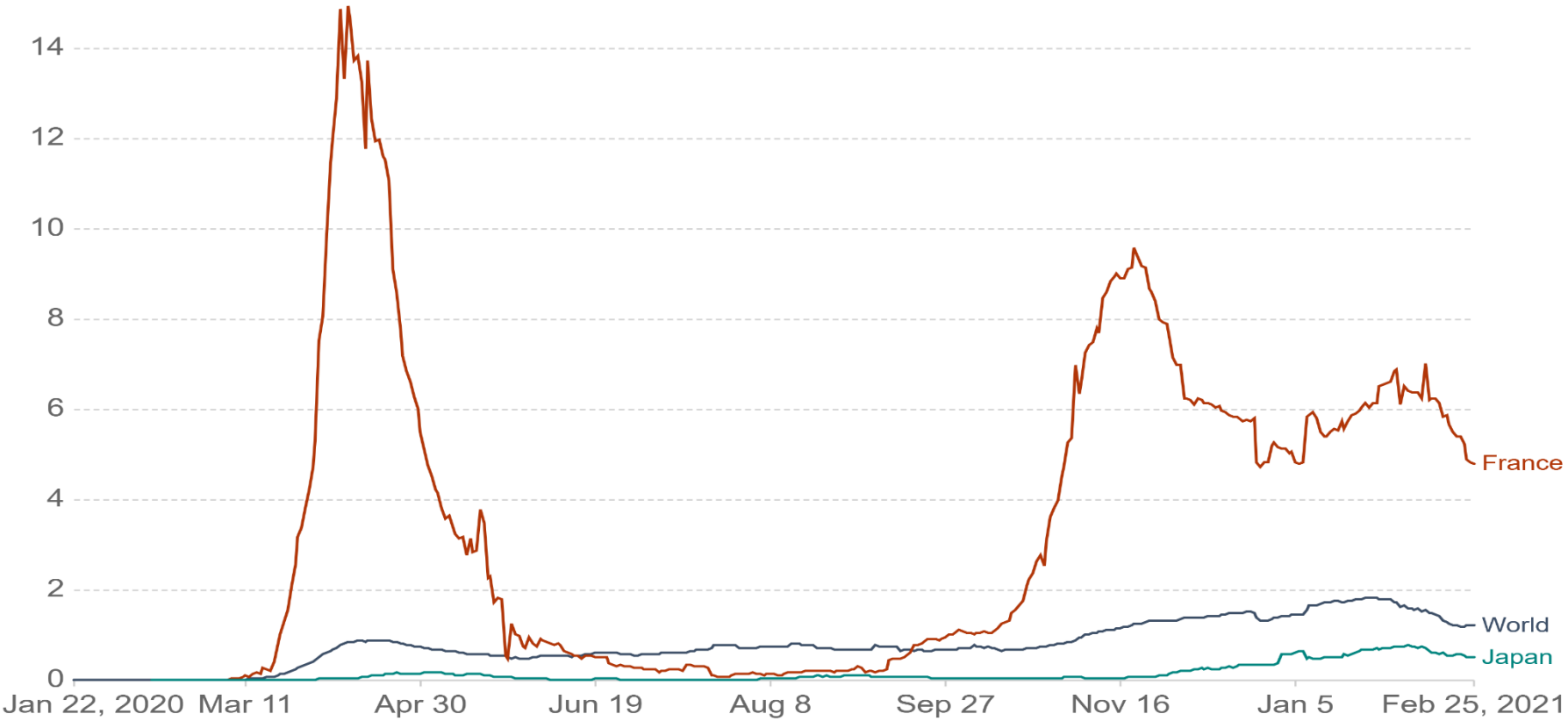
# Covid-19 pandemic and Health Economics in France

1. A short story of the first wave
  1. Health, health care, policy and the economy
2. Some thoughts on HTA



# Daily new confirmed COVID-19 deaths per million people

Shown is the rolling 7-day average. Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.

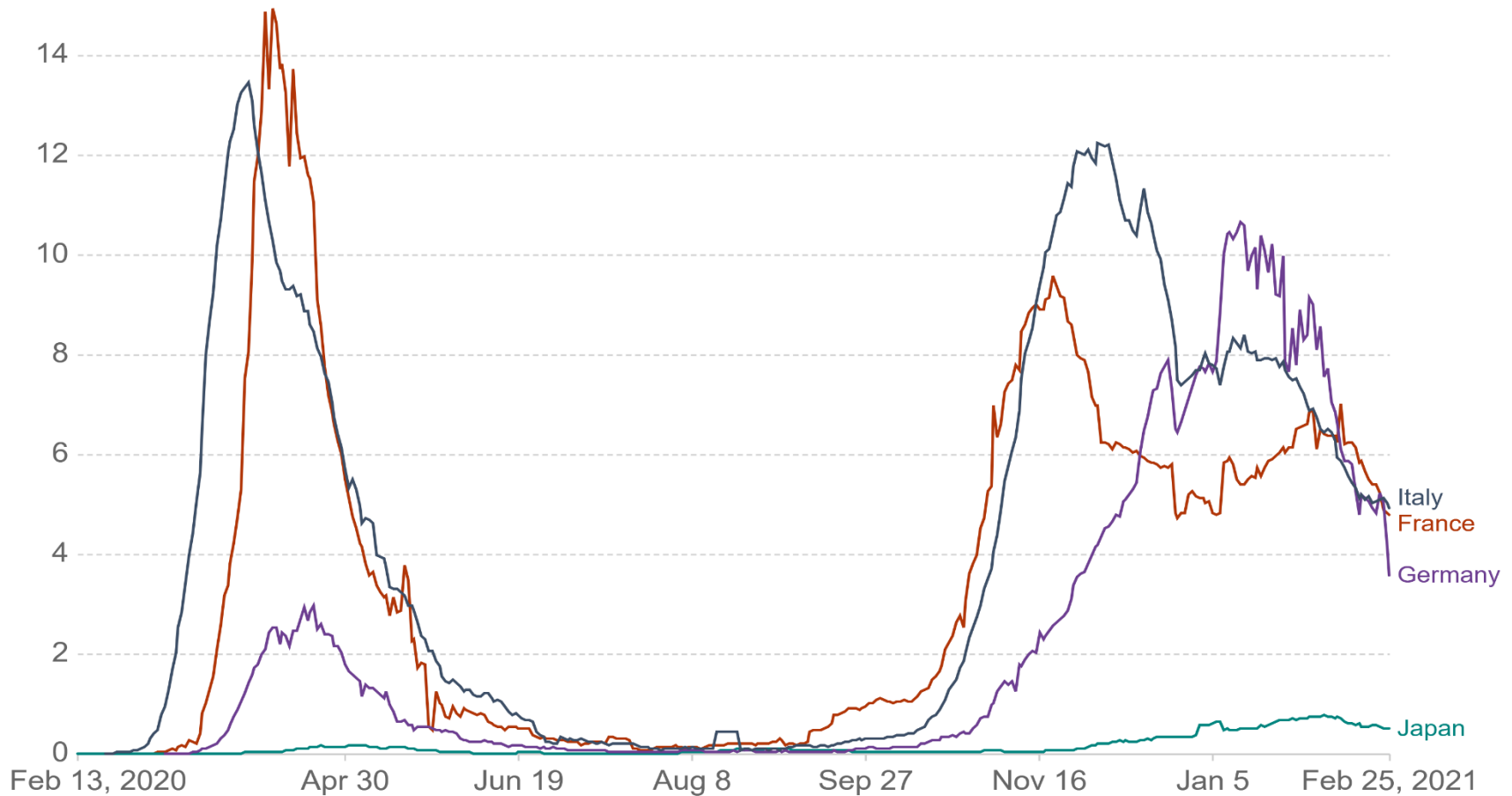


Source: Johns Hopkins University CSSE COVID-19 Data – Last updated 26 February, 10:02 (London time)



# Daily new confirmed COVID-19 deaths per million people

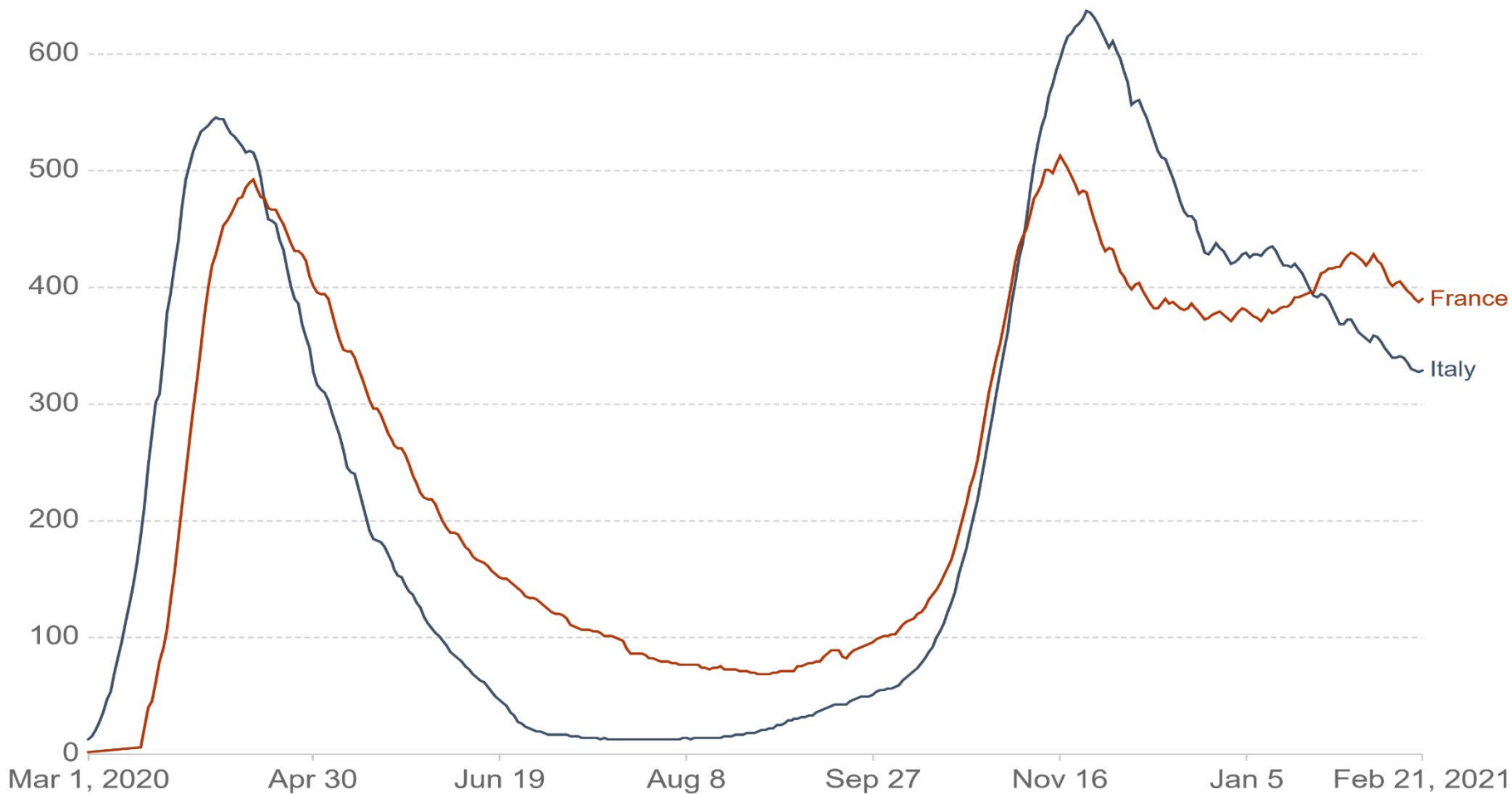
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# Number of COVID-19 patients in hospital per million

Our World  
in Data

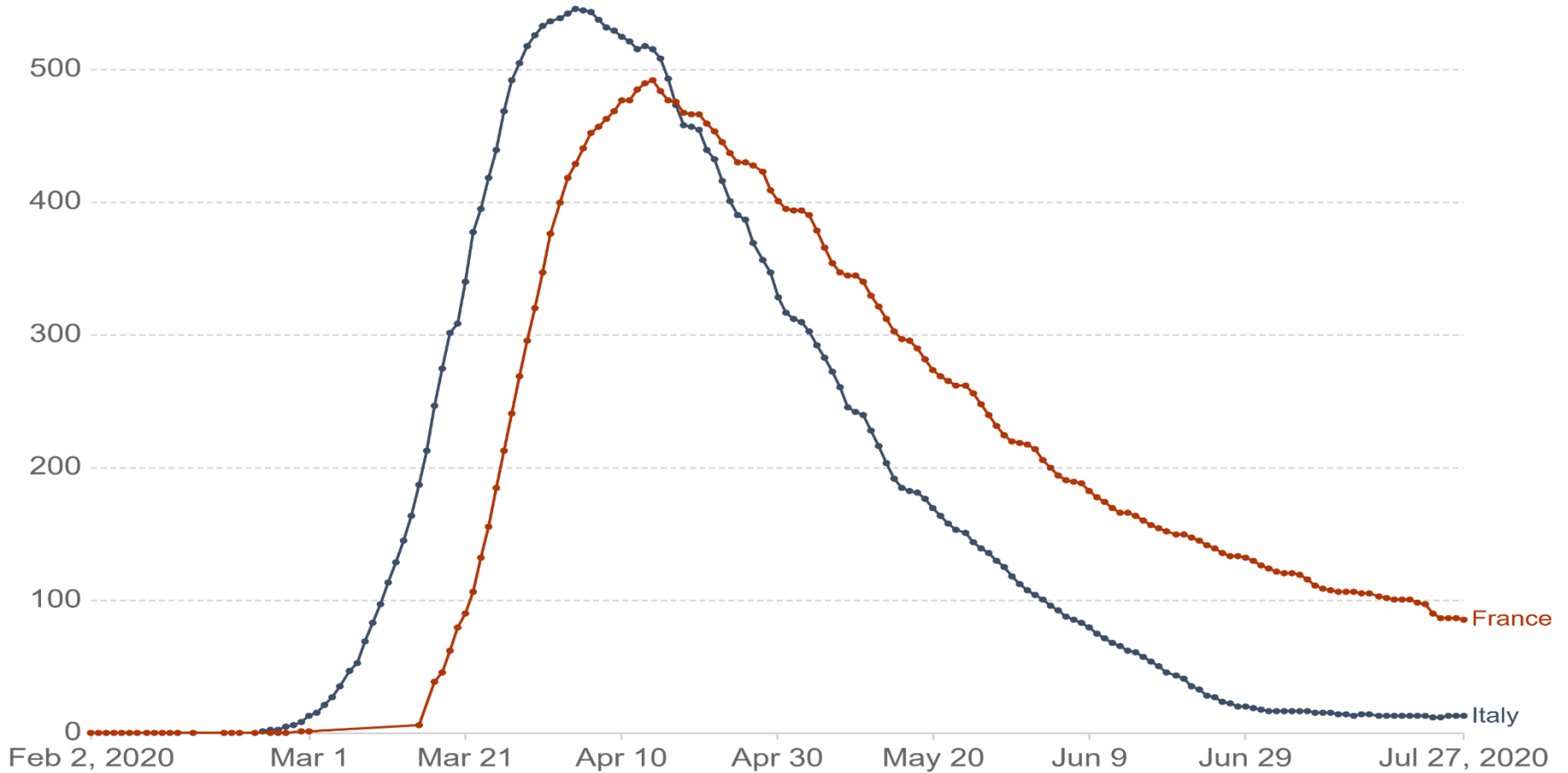


Source: European CDC for EU countries, government sources for other countries

OurWorldInData.org/coronavirus • CC BY



# Number of COVID-19 patients in hospital per million



Source: European CDC for EU countries, government sources for other countries

OurWorldInData.org/coronavirus • CC BY



## First wave

- February /early March:
  - Strong wave in Northern Italy
    - Saturated hospitals (Lombardia)
  - High hospitalisation rate in Eastern France
    - (following a mass church gathering)
  - Some (few) cases in all regions



# March 2020

- March 10: New Ad hoc Scientific Council (first of a long list...)
- 12: President Emmanuel Macron on TV:
  - Schools and Universities are closed
  - Smartworking promoted
  - Partial unemployment benefits
  - Local elections on March 15 maintained
- 14 : bars, restaurants, stores,... are closed
- 15 : 5423 confirmed cases, 127 deaths
- 16 : Macron on TV : «France is at war»
  - National lockdown for 2 weeks; 1million people leave Paris region just before
- 18 : not enough masks, very few tests
- 19 : 11000 cases, 372 deaths
- 27 : lockdown extended until April 15





## April-June 2020

- April 7 : 10000+ deaths
  - 7091 deaths at hospital
  - 3237 in nursing homes
- 13 : Macron on TV
  - Lockdown until May 11
- 15 : 15729 deaths
- April 27 : Masks authorised for sale in pharmacies
- May 5 : 25201 deaths
- May 11 : progressive end of lockdown
  - Sharp decrease of productive activity during 55 days
- June 22 : schools reopen (but not Universities)



# Economic activity

- During first lockdown:
  - Firms suffer
    - 35% of firms : more than 50% drop in activity
    - 38 % of firms : drop b/w 10 and 50%
    - 21% : drop lower than 10%
    - 3% : increase in activity
  - Output drops
    - 25% decrease of GDP in April (9% for the whole year)
  - Employment
    - 500 000 jobs destroyed
  - Public transfers: «Whatever it costs» (Em Macron)
    - Households (partial unemployment benefits)
    - Firms ( no taxes paid, etc)
    - Sharp increase in public deficit (11.4% in 2020)



# Some thoughts on HTA

- Evaluation of Non pharmaceutical interventions
  - Social distancing, masks, school closures, lockdown, curfew...
    - Few RCT
    - importance of social context
    - behavioural response
    - Balance b/w economic activity, (population) health impact, and health care constraints

# Some thoughts on HTA

## – HCQ

- «it works»
- «we do not know, but we have nothing else»
- Scientific publications :
  - in house journal...
- Public trust in science





# Some thoughts on HTA

## – Vaccines

- Fast track procedures (Phase I/II joined), regular exchange of information during trial
- Advanced Market Commitments on a large scale (EU level)
- Discovered, evaluated, and on the market in less than a year...



# Vaccine : what social value ?

- Pandemic : health cost, health care costs
  - Mostly the elderly
- Lockdown, etc: social and economic costs
  - Mostly the young, precarious
- Vaccine :
  - Reduces health costs for the old / econ costs for the young
  - Econ costs of lockdown : more than 5% of GDP



# Vaccine : social value ?

- Econ costs of lockdown : more than 5% of GDP
  - 130 Billion PPP\$ / 1940 \$ per capita
- If vaccination prevents 1 month of lockdown:
  - Econ benefit : 161 \$ / capita
- Lower bound estimate:
  - only takes into account econ costs
  - Based on low estimates of : GDP decrease / duration of avoided decrease.



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- Thank you!